



# ICEFIC 2015

**International Congress on Education for the Future:  
Issues and Challenges**

**May 13-15, 2015**

**ABSTRACT E-BOOK**

**ANKARA UNIVERSITY  
FACULTY OF EDUCATIONAL SCIENCES**





# ICEFIC 2015

**Uluslararası Eğitim Kongresi: Gelecek İçin Eğitim**

**13-15 Mayıs 2015**

**<http://www.icefic.com>**

**ANKARA ÜNİVERSİTESİ  
EĞİTİM BİLİMLERİ FAKÜLTESİ**

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The International Congress on Education for the Future:  
Issues and Challenges

ICEFIC 2015

May 13-15, 2015

Ankara, Turkey

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The ultimate responsibility for all the abstracts lies with the authors



We are proud to announce that the International Congress on Education for the Future: Issues and Challenges (ICEFIC 2015) took place on 13-15 May 2015 in Ankara to celebrate the 50<sup>th</sup> anniversary of the establishment of Ankara University Faculty of Educational Sciences.

The Faculty was established to be the first faculty of educational sciences in Turkey so as to fulfill the need for experts in the field of educational sciences. Since its establishment, the Faculty having made great contributions to the field of educational sciences has brought national and international researchers together via the scientific events organized.

ICEFIC 2015 is aimed at providing academics, educators and policymakers from around the world with an international platform to present new perspectives, to discuss trends and innovations, and to share best practices with one common goal of providing better education for future generations. To this end, the congress theme “Education for the Future: Issues and Challenges” was examined with a wide array of sub-themes on education through oral presentations, posters and workshops.

We appreciate all of the valuable contributions to the congress which was held in Ankara, the heart of the Republic of Turkey and the cradle of Anatolian civilizations, which provides an inspiration for international events with its historical and cultural richness.

Sincerely,

Ayşe Çakır İlhan, Ph.D.  
Dean of the Faculty of Educational Sciences

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Burcu Çabuk, Ph.D.

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İnci Öztürk



Emine Akyüz



Cansu Ayan

# PROGRAMME

----Day 1 - 13<sup>th</sup> of May

08.30	Registration					
09.30-11.00	Opening Ceremony					
11.00-12.00	KEYNOTE: Dr. Selçuk ŞİRİN <i>Can Turkish Youth Compete in the New Economy?</i>					
12.00-12.30	Happening					
12.30-14.00	Lunch					
14.00-15.00	KEYNOTE: Dr. Phyllis SWANN UNDERWOOD <i>Culturally Responsive Practice in the 21<sup>st</sup> Century: A Universal Cornerstone of Effective Teaching Practice</i>					
15.00-15.30	Coffee Break					
15.30-16.30	1 <sup>st</sup> Parallel Session Location: ATAUM Chair: Nizametin Koç	2 <sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Gönül Akçamete	3 <sup>rd</sup> Parallel Session- <b>Turkish Presentations</b> Location: 2. Hall Chair: Binnur Yeşilyaprak	4 <sup>rd</sup> Parallel Session- <b>Turkish Presentations</b> Location: 3. Hall Chair: Mine Tan	5 <sup>th</sup> Parallel Session Location: 5. Hall Chair: Fatma Bıkmaz	6 <sup>th</sup> Parallel Session Location: 6. Hall Chair: Gölge Seferoğlu
	<p><b>Alper Şahin &amp; David J. Weiss</b> <i>Effects of Calibration Sample and Bank Size on Ability Estimation in Computerized Adaptive Testing</i></p> <p><b>Nükhet Demirtaşlı</b> <i>The Applicability of CAT Form of an English Test for Classifying Examinees into Three Proficiency Categories</i></p> <p><b>C. Deha Doğan &amp; Müge Uluman</b> <i>Using R Software for Data Analysis in Social and Educational Sciences</i></p>	<p><b>Cevriye Ergül, Gökçe Karaman &amp; Gözde Akoğlu</b> <i>The Long Term Effectiveness of Dialogic Reading Intervention in the Acquisition of Reading Skills</i></p> <p><b>Hale Çotuk &amp; Banu Altunay Arslantekin</b> <i>The Effectiveness of Mobility Skills on Visually Impaired Children through Sibling Teaching</i></p> <p><b>Uğur Tekin &amp; Dilek Özgül</b> <i>Lacks of Early Interventions of Child Abuse and Solutions from the View of Educators</i></p>	<p><b>Şerife Özbiler</b> <i>The Analyses of Ethical Dilemmas in Psychological Counseling and Guidance Services at Northern Cyprus</i></p> <p><b>Şermin Külahoğlu &amp; Behnam Molaei</b> <i>Examination of “Possible Field” for Young People in Different Education and Orientation Systems</i></p> <p><b>Ayhan Gündaş &amp; Recep Koçak</b> <i>Self-Construct as a Predictor of Psychological Resilience in High School Students</i></p>	<p><b>Abdullah Adıgüzel</b> <i>The Most Important Necessity in Modern Education Understanding: Individual Interest and Family Teaching Model</i></p> <p><b>Melike Türkan Bağlı</b> <i>Who Has Got the Right to Construct?: The Role of Researcher in Educational Sciences</i></p> <p><b>Ersin Türe &amp; Pınar Demiray</b> <i>A Phenomenological Study on Absent Middle School Students</i></p>	<p><b>Nihal Akdere &amp; Hanife Akar</b> <i>The Critical Thinking Skills of Pre-Service Teachers in Turkey: A Holistic and Diagnostic Approach</i></p> <p><b>Suzan Beyza Kaptı</b> <i>Assessing the Teaching Methods and Techniques Used by Academic Staff at Faculty of Education</i></p> <p><b>Seydi Battal Bertlek</b> <i>Effects of Urban Renewal on Education of Children</i></p> <p><b>Mustafa Öztürk</b> <i>A Tale of Teacher Induction: What Might Future Teachers Experience in the South-</i></p>	<p><b>Mustafa Buluş &amp; Abdullah Atan</b> <i>Predictive Power of Self-Efficacy and Academic Involvement on Academic Satisfaction in Teacher Candidates</i></p> <p><b>Ceyhan Çıgdemoglu &amp; İsmail Bircan</b> <i>Changes in the Self-Efficacy Beliefs of Pre-Service Teachers through a Teacher Certification Program</i></p> <p><b>Mustafa Çağrı Gürbüz, Sevda Gülşah Yıldırım &amp; Demet Koç</b> <i>Review on the Professional Values of Teacher Candidates</i></p>

	<p><b>Dilara Bakan Kalaycıođlu</b> <i>Big Fish-Little Pond Effect on Mathematics Self-concept in Turkey</i></p> <p><b>Halime Yıldırım, Menekşe Uysal &amp; Nilüfer Kahraman</b> <i>A Multilevel Modeling Approach to Determine the Factors Influencing the Usefulness of Portfolio Assessment</i></p>	<p><b>Canan Altınyüzük</b> <i>Analysis of Differentiated Learning Strategies Used by Teachers</i></p> <p><b>Sema Büyüктаşkapu Soydan</b> <i>Some Variables Predicting the School Readiness of Preschool Children</i></p>	<p><b>İpek Gönüllü, Şengül Erden Boran &amp; Derya Öztuna</b> <i>The Effect of Communication Skills Education on Student Empathy throughout Medical School</i></p> <p><b>Aziz İlhan &amp; Muharrem Gemciođlu</b> <i>Investigation of the Relationship between 13-18 Age Students with Internet Addiction Internet Attitudes Example of Kahramanmaraş</i></p>	<p><b>Hülya Gülay Ogelman, Vuslat Ođuz, Özlem Körükçü &amp; Aysel Köksal Akyol</b> <i>Examination of the Effect of Perspective-Taking Skills of Six-Year-Old Children on Their Social Competences</i></p> <p><b>Abdülkadir Erdođan, Zeynep Akkurt Denizli &amp; Fatma Nur Çoban</b> <i>Ecological Problems in the Teaching of Perspective Drawings at 8<sup>th</sup> Grade</i></p>	<p><i>Eastern Anatolia?</i> <b>Sadettin Haluk Çitçi, Serhat Erat &amp; Kurtuluş Demirkol,</b> <i>Overconfidence in Classroom and its Effects on Field of Study</i></p>	<p><b>Mustafa Çađrı Gürbüz &amp; Hüseyin Özdemir</b> <i>A Constructivist Activity in the Area of Psychomotor Learning on Teaching Mathematics: Vocational High School Case</i></p>
16.30 16.45	Coffee Break					
16.45 17.45	<p>1<sup>st</sup> Parallel Session Location: ATAUM Chair: Serap Nazlı</p>	<p>2<sup>nd</sup> Parallel Session - <b>Turkish Presentations</b> Location: Hasan Ali Yücel Hall Chair: Latife Bıyıklı</p>	<p>3<sup>rd</sup> Parallel Session Location: 2. Hall Chair: Emine Gül Kapçı</p>	<p>4<sup>th</sup> Parallel Session Location: 3. Hall Chair: Nejla Kurul</p>	<p>5<sup>th</sup> Parallel Session Location: 5. Hall Chair: Ali Balcı</p>	<p>6<sup>th</sup> Parallel Session Location: 6. Hall Chair: Yasemin Kepenekçi</p>
	<p><b>Michael L. Bentley &amp; Stephen Fleury</b> <i>A Critical-Creative Social Constructivist Perspective for Science Education</i></p> <p><b>Nuri Balta &amp; Muharrem Duran</b> <i>Job-Embedded Professional Development and Student Achievement: A Meta-Analysis</i></p>	<p><b>Bengisu Kaya</b> <i>Teaching of Italic Handwriting to a 4th Grade Student with Dysgraphia (An Action Research)</i></p> <p><b>Emel Ertürk Mustul, Zerrin Turan &amp; Yıldız Uzuner</b> <i>Examining the Interaction between a Child with Hearing Loss and His Mother</i></p>	<p><b>Gürcan Seçim</b> <i>Evaluation of Effects of Individual Psychological Counseling Supported with Cognitive Behavioral Approach in Selective Mutism Case</i></p> <p><b>Ali Serdar Sađkal, Abbas Türnüklü &amp; Zekavet Topçu Kabasakal</b> <i>Peacemaker Students' Perceptions of the Peacemaking Process</i></p>	<p><b>Dürdane Bayram Jacobs</b> <i>Responsible Research and Innovation: What Is It? How to Engage in Science Education</i></p> <p><b>Feride Keskin &amp; Aylin Maç</b> <i>Relationships among Elementary Students' Meta-Cognitive Skills and Motivation toward Science Learning</i></p>	<p><b>Ali Balcı</b> <i>Some Reforms in Secondary Education and its Inferences for Turkish Secondary Subsystem in the Knowledge Age</i></p> <p><b>Aycan Çiçek Sađlam, Cennet Yađmur Çimen &amp; Seniye Fulya Kabar</b> <i>Management Training Profile in Developed and Developing Countries</i></p>	<p><b>Fatma Özüdođru &amp; Oktay Cem Adıgüzel</b> <i>The Analysis of the Views of English Teachers about 2nd Grade English Curriculum</i></p> <p><b>Sedef Süer</b> <i>Evaluating 2nd Grade English Language Teaching Program under the Light of English Language Teachers' Opinions</i></p>

	<p><b>İshak Kozikoğlu &amp; Nuray Senemoğlu</b> <i>The Content Analysis of Dissertations Completed in the Field of Curriculum and Instruction (2009-2014)</i></p> <p><b>Aziz İlhan &amp; Tayfun Tutak</b> <i>Elementary Mathematics Teacher of Mathematics for Visual Literacy Scale's Development</i></p>	<p><b>Selma Akalın</b> <i>Opinions and Needs of Mainstream Classroom Teachers about Classroom Management</i></p> <p><b>Berrin Baydık, Zeynep Bahap Kudret, Şaziye Seçkin Yılmaz &amp; Mustafa Ceylan</b> <i>School Administrators' Opinions on Special Education Teachers' Competencies</i></p>	<p><b>Adem Peker</b> <i>Psychological Counselors' Perceptions about Their Roles and Responsibilities in School Safety</i></p> <p><b>Zekavet Topçu Kabasakal, Ali Serdar Sağkal &amp; Abbas Türnüklü</b> <i>The Effects of Peace Education Program on Students' Violence Tendencies and Social Problem-Solving Skills</i></p> <p><b>Sultan Nezihe Turhan &amp; Celile Eren Ökten</b> <i>A Mobile Educational Application For Children with Autism Spectrum Disorder</i></p>	<p><b>Bayram Özer, İsmail Gelen &amp; Volkan Duran</b> <i>Investigation of Hypothetico-Creative Reasoning Skills of Teacher Trainees in Terms of Their Scientific Epistemological Beliefs</i></p> <p><b>Mehmet Karakuş &amp; Melis Yeşilpınar</b> <i>The Implementation and Evaluation Study of an Instruction Design Based on the Interdisciplinary Approach</i></p>	<p><b>Atakan Ata, Sally Zepeda, Abdurrahman İlğan, Öykü Özü-Cengiz, Muhammad Akram &amp; Albert Jimenez</b> <i>Teachers' Perceptions on The Quality of School Work Life in Pakistan, Turkey, and the USA</i></p> <p><b>Celal Gülşen &amp; Derya Ü. Bozkurt</b> <i>Administration Model for Education Executives in Private Schools and Teachers' Perception in This Sense</i></p>	<p><b>Hasan Güner Berkant &amp; İsmail Eren</b> <i>Investigation of Secondary School English Teachers' Views on Developing Learner Autonomy of Students</i></p> <p><b>Canan Karababa, Ayfer Alper, Fulya Soğuksu &amp; Tuğra Karademir</b> <i>Development of the Multimedia Material Design Portal for Teaching Turkish As a Foreign Language</i></p>
17.45 18.45	Special Session: 50 Years of Faculty of Educational Sciences (EĞİTİM BİLİMLERİ FAKÜLTESİ'NİN 50 YILI) Moderator: Ayşe ÇAKIR İLHAN					
19.30	Opening Cocktail					

Day 2- 14<sup>th</sup> of May

08.30	Registration					
09.00-10.00	KEYNOTE: Dr. Aydın Yücesan Durgunoğlu <i>Literacy Development in Children and in Adults: Successes, Challenges and Future Directions</i>					
10.00-10.30	Coffee Break					
10.30-11.30	1 <sup>st</sup> Parallel Session Location: ATAUM Chair: Selahiddin Ögülmüş	2 <sup>nd</sup> Parallel Session - <b>Turkish Presentations</b> Location: Hasan Ali Yücel Hall Chair: Gelengül Haktanır	3 <sup>rd</sup> Parallel Session Location: 2. Hall Chair: Rifat Miser	4 <sup>th</sup> Parallel Session - <b>Turkish Presentations</b> Location: 3. Hall Chair: Meral Uysal	5 <sup>th</sup> Parallel Session - <b>Turkish Presentations</b> Location: 5. Hall Chair: Hasan Hüseyin Aksoy	6 <sup>th</sup> Parallel Session Location: 6. Hall Chair: Nuray Senemoğlu
	<p><b>Murat Balkis, Gökmen Arslan &amp; Erdiñ Duru</b> <i>The School Absenteeism among High School Students: Contributing Factors</i></p> <p><b>Yasemin Özkan &amp; Metin Pişkin</b> <i>Frequencies of Bullying among Adolescents Staying in Orphanages Houses in Turkey</i></p> <p><b>Evi Marlina Sahli</b> <i>Educating for Indigenous Community: Suku Anak Dalam through Social Empowerment Based on Local Cultural Skill</i></p> <p><b>Djems Villard &amp; Selahiddin Ögülmüş</b> <i>The Study of Intrinsic Motivation of Haitian Middle and High School</i></p>	<p><b>Zeynep Kılıç &amp; Gelengül Haktanır</b> <i>The Things That Children Don't Want to See at School Playground</i></p> <p><b>Hülya Yıldızlı &amp; Raci Demir</b> <i>A Study on Students' Self-Regulated Learning Skills for Mathematics Achievement and Learning Styles</i></p> <p><b>Şenel Elaldı</b> <i>Investigating English Language A and Literature Students' Lifelong Learning Dispositions in Terms of Different Variables</i></p>	<p><b>Sencer Bulut Özsezer &amp; Ayten İflazoğlu Saban</b> <i>The Investigation on Teacher Candidates' Perceptions about Physical Dimension of Classroom Management</i></p> <p><b>Sevde Şimşek, Durmuş Özbaşı, Ahmet Aypay &amp; Nurgün Varol</b> <i>Teacher Education Students' Academic Misconduct Behaviors</i></p> <p><b>Şebnem Kandil İnceç, Emre Özçelik, Mustafa Erdemir, Tuğba Bolat, Kübra Akyol, Engin Alkan, Tuba Cari &amp; Arzu Kaganarlan</b> <i>Investigation of Pre-Service Teachers' Innovative Approach in Terms of Different Variables</i></p>	<p><b>Ahmet Uzundere</b> <i>Seasonal Workers and Education</i></p> <p><b>Nuray Türkmen, Meral Uysal, Fevziye Sayılan, Ahmet Yıldız, Eylem Türk, Deniz Dinçel, Nurcan Korkmaz &amp; Hüseyin Kete</b> <i>Primary Education Problems of Seasonal Agricultural Workers' Children</i></p> <p><b>Pelin Taşkın &amp; Funda Nayır</b> <i>Do Schools Have Legal Personalities? Should They?</i></p> <p><b>Veysel Okçu, Sabır Çevik &amp; Naman Bakaç</b> <i>The Impact of Secondary Education Teacher's Perceptions of Organizational Justice on Work Alienation (Siirt Province Case)</i></p>	<p><b>İnayet Aydın, Özge Erdemli, Burcu Bozgeyik &amp; Tuğba Güner Demir</b> <i>Employee Silence in Universities: Causes of Research Assistants' Silence</i></p> <p><b>Hasan Basri Memdukoğlu &amp; Birsen Kaya</b> <i>The Relationship between Motivation Methods of School Principals and Work and Private Life Balance of Teachers</i></p> <p><b>Aynur B. Bostancı, Kazım Çelik &amp; Ümit Kahraman</b> <i>The Relationship between the Schools' DNA Profile and Teachers' Psychological Capital</i></p> <p><b>Bakır Arabacı</b> <i>The Organizational Citizenship Behaviors Demonstrated by Teachers Who Work at Primary Schools in Villages</i></p>	<p><b>Mustafa Öztürk &amp; Ali Yıldırım</b> <i>English As a Foreign Language Instructors' Cognitions on Language Learning Processes</i></p> <p><b>Canan Karababa &amp; John Murray</b> <i>Where to Now? Issues in Preparing Learners for Language Use Beyond the Classroom Context</i></p> <p><b>Yasemin Kırkgöz, Reyhan Ağçam &amp; Muzaffer Pınar Babanoğlu</b> <i>Corrective Feedback in Foreign Language Education in Turkey</i></p> <p><b>Elif Sayar</b> <i>Investigating EFL Teachers' Students' Conceptions of Professional Teacher Identity through Metaphor Analysis</i></p>

	<p><b>Katarzyna Walecka-Matyja</b> <i>The Specificity of the Educational Process of a Child in a Foster Care Environment in the Psychological Perspective</i></p>	<p><b>Mehlika Köyceğiz, Elif Yorgun, Merve Ağaçdan, Dicle Akaydın &amp; Fatma Tezel Şahin</b> <i>The Present and Past of Family Involvement in Preschool Education Programs of Ministry of Education</i></p>	<p><b>Bekir Sezen &amp; Ahmet Bedel</b> <i>Examination: Effect of Negotiation (Problem Solving) And Mediation Education on Interpersonal Problem Solving Skills of Adolescents and Their Levels of Anger</i></p>			<p><b>Yunus Alyaz, Zübeyde Sinem Genç &amp; Şeref Kara</b> <i>Digital Game-Based Language Learning in Foreign Language Teacher Education</i></p>
11.30 11.45	Coffee Break					
11.45 12.45	<p>1<sup>st</sup> Parallel Session Location: ATAUM Chair: Hasan Ünder</p>	<p>2<sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Adnan Tepecik</p>	<p>3<sup>rd</sup> Parallel Session Location: 2. Hall Chair: Cahit Kavcar</p>	<p>4<sup>th</sup> Parallel Session - <b>Turkish Presentations</b> Location: 3. Hall Chair: Dilek Gözütök</p>	<p>5<sup>th</sup> Parallel Session Location: 5. Hall Chair: Süleyman Çetin Özoğlu</p>	<p>6<sup>th</sup> Parallel Session - <b>Turkish Presentations</b> Location: 6. Hall Chair: Canan Aslan</p>
	<p><b>Goshgar Maharramov</b> <i>Reflections of Soviet Union Education Philosophy on Azerbaijan Education Practices</i></p> <p><b>Emre Arda Erdenk</b> <i>Constructing Values for the Trans-Human and Trans-Humanist Agenda</i></p> <p><b>Arif Oruç</b> <i>Education in Hobbes's Political Theory and Its Effects on Locke and Rousseau</i></p> <p><b>Nejla Doğan</b> <i>Rethinking Equal Opportunity and Justice in Education</i></p>	<p><b>Mehmet Fatih Ayaz &amp; Behçet Oral</b> <i>The Effect of Instructional Materials of the Students' Attitudes towards Lessons: A Study of Meta-Analysis</i></p> <p><b>Veli Batdı &amp; Hacer Batdı</b> <i>The Effect of Creative Drama on Academic Success: A Meta-Analytic and Thematic Analysis</i></p> <p><b>Suzan Beyza Kaptı &amp; Nuray Senemoğlu</b> <i>Students' Perception of Quality of Instruction in Case Based Learning</i></p> <p><b>Melek Alemdar &amp; İsmail Yüksel</b> <i>Examining the Emotional Literacy Skill Levels of High School Students</i></p>	<p><b>Ufuk Cem Komşu</b> <i>A Proposal of Poetic Approach in Adult Education</i></p> <p><b>Mukaddes Örs</b> <i>Condition of Public Primary Schools in Terms of Parental Social Support and Learning Needs of Parents</i></p> <p><b>Perihan Tutar</b> <i>Women's Political Learning Experiences: Ka.Der Education</i></p> <p><b>Sultan Güçlü &amp; Ruhi Selçuk Tabak</b> <i>Effects of Students' Adult Training Activities on Their Emotional Intelligence and</i></p>	<p><b>İlknur Maya</b> <i>A Comparison of Educational Indicators Influencing Countries' Achievements According to PISA Results</i></p> <p><b>Osman Çekiç &amp; Efrahim Ezgin Çelik</b> <i>Analyzing the Village Institutes' Planning Stages: Status Assessment</i></p> <p><b>Özgür Ulubey &amp; Dilek Gözütök</b> <i>The Implementation and Evaluation of the Citizenship and Democracy Education Curriculum Enriched by Creative Drama and Interactive Teaching Methods</i></p>	<p><b>Derya Çakıcı Eser</b> <i>Item Parameter Estimation of Mixed-Structured Tests Based on Multidimensional Item Response Theory</i></p> <p><b>Hakan Koğar &amp; Esin Yılmaz</b> <i>Comparison of Different Estimation Techniques for Categorical and Ordered Data in Confirmatory Factor Analysis</i></p> <p><b>Murat Akyıldız &amp; Murat Doğan Şahin</b> <i>Dimensionality and Scalability of a Large Scale Exam by Means of Item Response Theory</i></p>	<p><b>Özlem Sevgi Kaya &amp; Ege Akgün</b> <i>The study of Preschool Children's School Adjustment According to Some Variables</i></p> <p><b>Şebnem Kandil İngeç &amp; Sinem Dilbilmez</b> <i>Opinions of Pre-Service Teachers about Innovation Application Areas and Innovation in Education</i></p> <p><b>Yasemin Acar Çiftçi &amp; Hasan Aydın</b> <i>The Perceptions of Preschool Teachers Regarding Culturally Responsive Teaching</i></p>

		<b>Dilek Gözütok &amp; Candan Özer</b> <i>Development, Implementation and Evaluation of Peer Education Program towards Students with Special Requirement</i>	<i>Academic Motivation</i> <b>Ş. Erhan Bağcı</b> <i>Lifelong Learning in Turkey: Market-Based and Neoconservative</i>	<b>Sıddıka Gizir &amp; Sevgi Yıldız</b> <i>“The Evaluation of Prospective Teachers’ Perceptions Regarding the Concepts of Ideal School, Ideal Teacher, and Ideal Student in the Context of Teacher Training”</i>	<b>Nilüfer Kahraman, Halime Yıldırım &amp; Menekşe Uysal</b> <i>Assessing the Underlying Structure of Response Data Using A Multi-Group Structural Equation Modeling Approach</i>  <b>Nejdet Karadağ, Alper Tolga Kumtepe &amp; Murat Akyıldız</b> <i>Comparing Classic Test Theory and Item Response Theory Based Ability Estimates of a Large Scale Exam</i>	<b>Hilal Kazu &amp; Demet Demiralp</b> <i>Development of the Personal and Professional Competence Perception Scale towards Lifelong Learning</i>
12.45 14.00	Lunch					
14.00 15.00	KEYNOTE: Dr. Üstün DÖKMEN <i>Evolution of Language, Thought and Education</i>					
15.00 15.30	Coffee Break					
15.30 16.30	1 <sup>st</sup> Parallel Session Location: ATAUM Chair: İsmail Güven	2 <sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Nurettin Şimşek	3 <sup>rd</sup> Parallel Session Location: 2. Hall Chair: İclal Ergenç	4 <sup>th</sup> Parallel Session- <b>Turkish Presentation</b> Location: 3. Hall Chair: Cevat Celep	5 <sup>th</sup> Parallel Session Location: 5. Hall Chair: Fatma Mızıkacı	Joint Session Location: 6. Hall Moderator: Mustafa Sever
	<b>Gökçe Top &amp; Pınar Özdemir</b> <i>A Study about the Effect of Science Fairs</i>  <b>Zeynep Selin Dürer &amp; Meral Öztürk</b> <i>Extensive Reading in Foreign Language Vocabulary Learning: A Longitudinal Study</i>	<b>Meltem Eryılmaz</b> <i>Flipped Classroom and Cognitive Load</i>  <b>Ceyhan Çiğdemoglu &amp; Harika Özge Arslan</b> <i>A Content Analysis of Intervention Research on Flipped Classroom</i>	<b>Ayfer Kocabaş</b> <i>The Effects of Rhythmical Articulation Skills of Primary School Teachers Candidates on Playing Instrument Skills</i>  <b>Ayşe Çakır İlhan, Müge Artar, Ayşe Okvuran &amp; Ceren Karadeniz</b> <i>Education in Museums and Qualities of a Museum Educator within Contemporary Museology</i>	<b>Özkan Küçük</b> <i>The Relationship between Toxic Leadership Behavior of Managers and Organizational Silence Behavior of Teachers</i> <b>Şükrü Ada, Ahmet Ayık &amp; Gamze Tuti</b> <i>Research of the Relationship between Innovation Management Competencies of School Administrators and Organizational Communication</i>	<b>Mehmet Özbaş</b> <i>Views of Turkish Language and Literature Department Teachers and School Managers Related to the Vocational and Organizational Socialization Processes</i>  <b>Melek Çakmak</b> <i>A Qualitative Inquiry: Pre-Service Teachers' Stories on Their Teaching Practicum Process</i>	<b>Mustafa Sever</b> <i>Minding the Gap between School and Academy</i>  <b>Müge Olğun &amp; Zekeriya Çam</b> <i>Being a Student in Vocational Religious High School</i>  <b>Burcu Çıldır &amp; Nergiz Üçüncü</b> <i>Being a Student in Fine Arts High School</i>

	<p><b>Onur Çalışkan</b> <i>Real and Virtual Fieldtrips in Earth and Environmental Science Teaching</i></p> <p><b>Osman Çimen &amp; Meryem Yılmaz</b> <i>Examining the Motivation Towards Recycling as the Predictor of Recycling Behavior</i></p> <p><b>Zeynep Selin Dürer &amp; Meral Öztürk</b> <i>English Lecturer/ a PhD Candidate on Teaching Turkish As a Foreign Language</i></p> <p><b>Parvin Bazghandi, Saeid Zarghami-Hamrah, Yahya Ghaedy, Alireza Mahmudnia &amp; Khosrow Bagheri Noaparast</b> <i>Suggesting Some Refers for Teaching Chemistry based on an Explanation of Complex Systems Theory</i></p>	<p><b>Erman Yükseltürk &amp; Serhat Altıok</b> <i>Evaluation of a Scientific Meeting about Programming Education: the Participants' Views</i></p> <p><b>Gülsün EBY</b> <i>Project SELCA: Building a Distance Learning Milieu via the Software Engineering Life Cycle Approach</i></p> <p><b>Hakan İslamoğlu &amp; Safa Çelebi</b> <i>A Proposal for Turkish Language Association's Online Dictionaries in Terms of Multimedia Design Principles</i></p>	<p><b>Bengü Batu</b> <i>Semiotics in the Future of Art Education</i></p> <p><b>Zeki Özen &amp; İhsan Metinnam</b> <i>Oral History in Drama Work: A Witness for Drama Revolution-Drama in Education Ensemble</i></p>	<p><b>Veysel Okçu, İdil Dayanan &amp; Emine Doğan</b> <i>Effect of Primary and Secondary School Teachers' Perceptions with Regard to School Culture on Directors' Conflict Management Styles</i></p> <p><b>Yasemin Karaman Kepenekci &amp; Caner Cereci</b> <i>Responsibilities of School Principals in Preventing and Solving Incidents of Child Abuse and Neglect</i></p> <p><b>Fatma Tezcan &amp; Ahmet Duman</b> <i>Motivational Orientations and Positive Teacher Perceptions of Student Teachers Participated Teacher Certification Program at Muğla Sıtkı Koçman University</i></p>	<p><b>Hande Serdar Tülüce &amp; Sevdeğer Çeçen</b> <i>Scrutinizing Practicum for a More Powerful Teacher Education: A Longitudinal Study with Pre-Service Teachers</i></p> <p><b>Hande Serdar Tülüce</b> <i>The Use of Pre-Service Teacher-Generated Case Studies in Teacher Education: Maximizing the Practicum</i></p> <p><b>S.Nilay Işıksalan</b> <i>The Contribution of Postmodern Narratives to Literature Teaching</i></p>	<p><b>Tuğra Karademir &amp; Özgür Ulubey</b> <i>Being a Student in Anatolian High School</i></p> <p><b>İnci Öztürk</b> <i>Being a Student in Vocational High School</i></p> <p><b>A. Fulya Soğuksu &amp; Yonca Koçmar</b> <i>Being a Student in Social Sciences High School</i></p> <p><b>Ayşe Gülsüm Akçatepe &amp; Ersin Türe</b> <i>Being a Student in Science High School</i></p>
16.30 16.45	Coffee Break					
16.45 17.45	<p>1<sup>st</sup> Parallel Session- <b>Turkish Presentation</b> Location: ATAUM Chair: Ömer Adıgüzel</p>	<p>2<sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Hafize Keser</p>	<p>3<sup>rd</sup> Parallel Session Location: 2. Hall Chair: Sedat Sever</p>	<p>4<sup>th</sup> Parallel Session Location: 3. Hall Chair: Seher Sevim</p>	<p>5<sup>th</sup> Parallel Session Location: 5. Hall Chair: Nükhet Demirtaşlı</p>	<p>6<sup>th</sup> Parallel Session Location: 6. Hall Chair: Renan Sezer</p>
	<p><b>Gülay Göğüş</b> <i>Evaluation of the Views with Regards to Cognitive Skills of 3rd Grade Students Within the Scope of Museum Educational Practices</i></p>	<p><b>Gülsün Eby</b> <i>Open and Distance Learning and Human Centered Ecological Design</i></p>	<p><b>Kevser Koç</b> <i>How Do Young Readers Give Meaning to the Pictures in a Story Book?</i></p>	<p><b>Kamil Yıldırım &amp; Coşkun Erdağ</b> <i>The Relationship between School Characteristics and Teacher Related Learning Hindrances at Turkish Schools</i></p>	<p><b>Önder Sünbül &amp; Seha Yormaz</b> <i>Type I Error Rates and Powers Study of K Indices for Detecting Answer Copying</i></p>	<p><b>Gökhan Baş</b> <i>Correlation between Teachers' Educational Philosophy Beliefs and Their Teaching-Learning Conceptions</i></p>

	<p><b>Hüseyin Altınova &amp; Elif Gökçearaslan Çiftci</b> <i>Structured Creative Drama Program in the Development of Communication Skills</i></p> <p><b>Ömer Çetinkaya</b> <i>Content Analysis of Dissertation of Creative Drama Training</i></p> <p><b>Süreyya Genç &amp; Tülay Erduran</b> <i>Reflections of Audio Books in Electronic Environment to Child's Paintings</i></p> <p><b>Zahide Dalbudak Pekdemir &amp; Aysel Köksal Akyol</b> <i>Examination of the Effect of Drama Education on Multiple Intelligence Domains of Children Attending to 5th Grade</i></p>	<p><b>Mehmet Fatih Ayaz &amp; Hanifi Şekerci</b> <i>The Effect of Using of Instructional Technology to Elementary School Students' Academic Achievement: A Meta-Analysis Study</i></p> <p><b>Ayşe Soylu &amp; Ahmet Kaysılı</b> <i>A Critical Look to Using New Information and Communication Technologies in Education</i></p> <p><b>Meltem Kuşçu &amp; Sultan Ayaz &amp; Osman Çekiç</b> <i>Educational Informatics Network Planning</i></p>	<p><b>Mehmet Özbaş &amp; Abdullah Arslan</b> <i>Views of Turkish Language And Literature Department Teachers and School Managers Related to the Vocational and Organizational Socialization Processes</i></p> <p><b>Murat Güneşdoğdu &amp; Feryal Çubukçu</b> <i>Enhancing Critical Thinking Skills through Short Stories</i></p> <p><b>Volkan Duran, İsmail Gelen &amp; Bayram Özer</b> <i>The Analysis of Some Thought Experiments in Terms of the Dimensions of Hypothetico-Creative Reasoning Skills</i></p> <p><b>Gökçe Karaman &amp; Abide Güngör Aytar</b> <i>Development of Early Literacy Skills Assessment Tool, Validity and Reliability Study</i></p>	<p><b>Kamile Demir</b> <i>Teacher Characteristics, School Size and Relational Trust in Schools: A Meta-Analysis Study</i></p> <p><b>Leyla Yılmaz Fındık</b> <i>What Makes Difference for Disadvantaged Students?</i></p> <p><b>Necati Öztürk, Sevilay Şahin, Gökçe Özdemir &amp; Tuba Aydın</b> <i>The Effect of Social Intelligence Level of School Principals on Leadership Behaviors</i></p> <p><b>Taner Atmaca &amp; Engin Aslanargun</b> <i>Conflicts between Executive and Judicial Powers: the Cases of School Principals' Appointment</i></p>	<p><b>Semih Aşiret &amp; Seçil Ömür Sünbül</b> <i>Accuracy of Random Group Test Equating Methods</i></p> <p><b>Serpil Çelikten &amp; Emine Önen</b> <i>Comparison of Dichotomous Item Response Theory Models in Terms of Test Information Function</i></p> <p><b>Nuri Doğan, Meltem Yurtçu &amp; Sinan Yavuz</b> <i>Expert's Prediction Powers of Differential Item Functioning Levels of Math and Turkish Tests Items</i></p> <p><b>Hatice Kumandaş, Esra Çalık Var &amp; Şükran Kılıç</b> <i>Investigation the Effect of Problem Solving Skill and Empathy on Life Satisfaction</i></p>	<p><b>Gökhan Baş &amp; Zafer S. Kıvılcım</b> <i>High School Students' Conceptions of Learning And Instruction: A Study of Metaphor Analysis</i></p> <p><b>Cansu Bakırcı &amp; Serdar Aztekin</b> <i>The Role of Cognitive Conflicts in Teaching Second Order Equations</i></p> <p><b>Renan Sezer , Necdet Güner, Zeynep Akkurt Denizli &amp; Ayşegül Bayraktar</b> <i>The Development of a Scale to Determine Teachers' Opinions on the New Mathematics Curriculum</i></p>
19.30 22.00	GALA DINNER					

<b>Day 2- 14<sup>th</sup> of May; Poster Presentations- 10.00-12.00 -----Posters-----</b>	<b>Poster Numbers</b>
<b>Morteza Taheri</b> <i>Comparison of Basic Motor Abilities among Intelligent, Athlete and Common Students</i>	<b>1P1</b>
<b>Seval Orak</b> <i>Changing into the Educational Games of Traditional Games in Turkish Republic</i>	<b>1P2</b>
<b>Hatice Bilgin</b> <i>Evaluating the Parents' Opinions in the Co-Teaching System</i>	<b>1P3</b>
<b>Mediha Sarı &amp; Fatma Başarır</b> <i>Analyzing Teachers' Perceptions of "Female Teacher" and "Male Teacher" within Traditional Gender Roles</i>	<b>1P4</b>
<b>Osman Mutlu &amp; Yüksel Köseoğlu</b> <i>Development of Renewable Energy Scale for Preservice Science Teachers</i>	<b>1P5</b>
<b>Ahmet Akın, Lale Şentürk, Mustafa Ercengiz &amp; Mustafa Savcı</b> <i>The Validity and Reliability of the Turkish Version of the Instructional Dissent Scale</i>	<b>1P6</b>
<b>Ahmet Akın, Ümran Akın, Lale Şentürk, Mustafa Ercengiz &amp; Mustafa Savcı</b> <i>The Validity and Reliability of Turkish Version of Student Self-Efficacy Scale</i>	<b>1P7</b>
<b>Gürcan Seçim</b> <i>The Effects of Counseling Supported with Cognitive Behavioral Approach in Selective Mutism</i>	<b>1P8</b>
<b>Süleyman Balcı</b> <i>The Validity and Reliability Study of the Turkish Form of School Counselor Self-Efficacy Scale</i>	<b>1P9</b>
<b>Alper Tathı</b> <i>School Administration from a Child's Viewpoint: Preschool Children</i>	<b>1P10</b>
<b>Esef Hakan Toytok</b> <i>An Experimental Study on the Level of Professional Attitude and Self-Sufficiency of the Students Who Study at Pedagogical Training Program</i>	<b>1P11</b>
<b>İ. Bakır Arabacı, Nesli Taş Akarsu &amp; Mehtap Uygur</b> <i>Teacher Views on the Contribution of Place Management to Education</i>	<b>1P12</b>
<b>İlknur Maya &amp; Cüneyt Çalışkan</b> <i>Evaluation of Emergency Assistance and Disaster Education Programs at Higher Education Level in the World: Turkey Case</i>	<b>1P13</b>
<b>Mübeher Ürün Göker</b> <i>A Study on Burnout among EFL Instructors at Universities North Cyprus</i>	<b>1P14</b>
<b>Nezahat Güçlü, Fatih Şahin, Burcu Yavuz Tabak &amp; Emre Sönmez</b> <i>The Opinions of the Principal Candidates on Assignment Process of School Administrators in Turkey</i>	<b>1P15</b>
<b>Şükrü Ada, Durdağı Akan, İsa Yıldırım &amp; Sinan Yalçın</b> <i>The Relationship between Elementary School Principals' Personality Traits And Teachers' Job Satisfaction</i>	<b>1P16</b>
<b>Cemre Erten Tathı &amp; Derya Atalan Ergin</b> <i>Establishment of a Centre in Ankara to Develop the Creativity of Children, Educators, Parents</i>	<b>1P17</b>
<b>Belma Koç &amp; Ayşe Elitok Kesici</b> <i>The Effects of Cooperative Learning on Academic Achievement and Retention</i>	<b>1P18</b>
<b>Dilara Demirbulak &amp; Hayrettin Kenan</b> <i>Motivation of Turkish Police Cadets to Learn English</i>	<b>1P19</b>
<b>Melike Özudođru</b> <i>Evaluation of 10th Grade Mathematics Curriculum of General Secondary High Schools</i>	<b>1P20</b>
<b>Celal Gülşen &amp; Songül Çelenk</b> <i>Related Teachers' Perceptions of Managers Assignment Criteria</i>	<b>1P20</b>

<b>Day 2- 14th of May; Poster Presentations- 14.00-16.00 Posters</b>	<b>Poster Numbers</b>
<b>Köksal Banoğlu, Şengül Uysal &amp; Canan Madenoğlu</b> <i>Social Network Analysis of Informal Technology Leadership Structures by Personal, Professional And Technology-Related Interactions</i>	<b>2P1</b>
<b>Serdar Aztekin &amp; İlkay Abazaoğlu</b> <i>Pre-Service Math Teachers' Conceptions about Difficult Math Items</i>	<b>2P2</b>
<b>Betül Aydın, Oktay Bektaş &amp; Fulya Öner Armağan</b> <i>Views of Science Teachers Regarding Experiments in Their Courses</i>	<b>2P3</b>
<b>Ebru Erdoğan, Oktay Bektaş &amp; Fulya Öner Armağan</b> <i>Views of Science Teachers Regarding Science Textbooks</i>	<b>2P4</b>
<b>Yeliz Çelen</b> <i>Misconceptions of High School 12<sup>th</sup> Grade Students for the Formal Definition of the Limit</i>	<b>2P5</b>
<b>Mesut Hekim</b> <i>The Effect of Physical Activity on Development of Gross Motor Skills at Early Childhood Education (A Meta-Analysis Study)</i>	<b>2P6</b>
<b>Mesut Hekim</b> <i>The Importance of Sports in Supporting Physical and Motor Development in Early Childhood Education ( A Meta-Analysis Study)</i>	<b>2P7</b>
<b>F. Ülkü Kavruk</b> <i>Tales And Subliminal Messages: English and Turkish Translations of Grimm Brothers' Sneewittchen</i>	<b>2P8</b>
<b>İpek Gönüllü, Sengül Erden Boran &amp; Derya Öztuna</b> <i>The Effect of Communication Skills Education on Student Empathy throughout Medical School</i>	<b>2P9</b>
<b>İpek Gönüllü, Sengül Erden Boran &amp; Özgür Günar</b> <i>Using Standardized Patients in Medical Education Ankara University School of Medicine Experience</i>	<b>2P10</b>
<b>Seval Orak &amp; Meliha Küçükşahin</b> <i>Anatolian Myths in the Garden of Music with 5 E Learning</i>	<b>2P11</b>
<b>Burcu Seher Çalıkoglu &amp; Savaş Akgül</b> <i>An Evaluation on Undergraduate Programs for the Gifted and Talented Education in Turkey</i>	<b>2P12</b>
<b>Gamze Alaköse, Ela Ayşe Köksal &amp; Hülya Kahyaoğlu</b> <i>Elementary Teachers' and Administrators' Opinions of Interdisciplinary Approach</i>	<b>2P13</b>
<b>H. Coşkun Çelik &amp; Aziz İlhan</b> <i>Facebook Attitude Scale Development, Reliability and Validity Study</i>	<b>2P14</b>
<b>Fazıl Alptekin Ceylan</b> <i>Choose Your School and Direct It</i>	<b>2P15</b>
<b>Sırma Seda Bapoğlu Dümenci , Miray Özözen Danacı &amp; Nuray Eran</b> <i>36-48 Mounth-Old Children's Tendency Levels of Bullying in School</i>	<b>2P16</b>
<b>Zeynep Alica</b> <i>Empowering, Powering or None: A Discussion on the Text Books of Literacy Courses for Adults</i>	<b>2P17</b>

Day 3- 15<sup>th</sup> of May

08.30	Registration					
09.00-10.00	KEYNOTE: Dr. Maritza MacDONALD <i>Why Do Cultural Institutions Belong in the Curriculum for Teachers?</i>					
10.00-10.30	Coffee Break					
10.30-11.30	1 <sup>st</sup> Parallel Session Location: ATAUM Chair: <i>Saeid Zerghami-Hamrah</i>	2 <sup>nd</sup> Parallel Session- <b>Turkish Presentation</b> Location: Hasan Ali Yücel Hall Chair: Mahmut Adem	3 <sup>rd</sup> Parallel Session- <b>Turkish Presentation</b> Location: 2. Hall Chair: Dilek Gözütok	4 <sup>rd</sup> Parallel Session- <b>Turkish Presentation</b> Location: 3. Hall Chair: İlhan Akhun	5 <sup>th</sup> Parallel Session Location: 5. Hall Chair: Şakir Çınkır	6 <sup>th</sup> Parallel Session Location: 6. Hall Chair: Sinan Olkun
	<b>Mustafa Kahyaoglu &amp; M. İkbal Yetişir</b> <i>Teachers' Perceptions about Nature and Childrens' Secession to Nature: A Phenomenographic Analysis</i>	<b>Derya Neval Ayekin &amp; Gülümser Gültekin Akduman</b> <i>Analysis of the Attitudes of the Parents towards Sexually Abused Children</i>	<b>Kübra Şengül</b> <i>The Effects of Language Partnership Known As Tandem on Turkish Language Learners' Speaking Anxiety</i>	<b>Esra Kınay &amp; Ezel Tavşancıl</b> <i>A Meta-Analysis on Predictive Validity Studies of University Entrance Examination</i>	<b>Esef Hakan Toytok &amp; Nuran Oysal</b> <i>The Usability of Autopoiesis Approach in School Management System</i>	<b>Gönül Güneş &amp; Tuba Aydoğdu İskenderoğlu</b> <i>Review of Problem Posing Skills of Mathematics Students Who Receive Pedagogical Formation Training</i>
	<b>Özlem Çakır &amp; Ebru Oğuz</b> <i>Loneliness and Smartphone Addiction</i>	<b>Devlet Alakoç Pirpir &amp; Canan Yıldız Çiçekler</b> <i>Family Relationships of Working and Non-Working Mothers and Emotional Skills of Their Children</i>	<b>Nimet Akben</b> <i>The Effect of Problem Posing Applications in Teaching Science on Teacher Candidates' Problem Posing Skills and Their Meta-Cognitive Awareness</i>	<b>Hande Tanberkan Suna, Sibel Ada, Fuat Elkonca &amp; İsmail Karakaya</b> <i>Opinions Regarding Model Using E-Portfolio in Transition from Primary to Secondary Education)</i>	<b>Coşkun Erdağ &amp; Kamil Yıldırım</b> <i>The Relationship between Learning Problems and Principals' Management Styles at Turkish Schools</i>	<b>Güliz Karaarslan &amp; Deniz Mehmetlioğlu</b> <i>Transforming Mathematics Education for Sustainability: An Initial Attempt</i>
	<b>Saeid Zerghami-Hamrah</b> <i>Reviewing the Interaction of Information Technology and Education Based on a Linguistic/ Constructivist Approach</i>	<b>Dicle Akaydın &amp; Gülümser Gültekin Akduman</b> <i>The Relationship between Six-Year-Old Children's Emotional Intelligence Scores and Their Mothers' Depression Scores</i>	<b>Özlem Eryılmaz Muştu &amp; Ahmet İlhan Şen</b> <i>Reflection of the Changes in Modern Physics Curriculum on School Textbooks</i>	<b>İlkay Abazoğlu &amp; Serdar Aztekin</b> <i>Effect of Student Achievement Motivation of Teachers (Singapore, Japan, Finland and Turkey Sample)</i>	<b>Filiz Akar</b> <i>Identification of Academic and Managerial Talents' &amp; Viability of Talent Management in University</i>	<b>Ahmet Gökmen &amp; Serhat İnan</b> <i>The Perceptions of Pre-Service Science Teachers about Content and Language Integrated Learning</i>
	<b>Serhat Altrok &amp; Erman Yükseltürk</b> <i>The Current Visual Tools and Methodologies of Computer Programming Teaching in K-12 Education</i>	<b>Didem Türkoğlu &amp; Gülümser Gültekin Akduman</b> <i>Analyzing Father's Involvement Status in Family Participation Activities on Pre-School Children's Behavioral Problems</i>	<b>Tülay Sarar Kuzu</b> <i>Term Formation and Teaching Problems of Figures of Speech (Metaphor, Simile, Metonym)</i>	<b>Esef Hakan Toytok, Yunus Sözen &amp; Nuran Oysal</b> <i>Teachers' Perceptions of Organizational Level Related to Hygiene And Motivation Theory</i>	<b>İbrahim Burak Ölmez</b> <i>Two Distinct Perspectives on Ratios: Additive and Multiplicative Relationships between Proportionally Related Quantities</i>	

	<p><b>Habib Samadzade</b> <i>Selection of Managers for Educational Institutions Affiliated to the Education Ministry of Iran</i></p>			<p><b>Safiye Bilican Demir &amp; Belma Türker</b> <i>How Teacher Variables Do Influence PISA Mathematics Content Analysis of Research Articles in Measurement and Evaluation Journals Performance of Schools</i></p> <p><b>Seher Yalçın</b> <i>Content Analysis of Research Articles in Measurement and Evaluation Journals</i></p>		
11.30 11.45	Coffee Break					
11.45 12.45	<p>1<sup>st</sup> Parallel Session Location: ATAUM Chair: Yıldız Kuzgun</p>	<p>2<sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Celal Bayrak</p>	<p>3<sup>rd</sup> Parallel Session Location: 2. Hall Chair: Sibel Güneysu</p>	<p>4<sup>th</sup> Parallel Session Location: 3. Hall Chair: Hülya Kelecioğlu</p>	<p>5<sup>th</sup> Parallel Session Location: 5. Hall Chair: Yüksel Kavak</p>	<p>Joint Session Location: 6. Hall Moderator: Figen Çok</p>
	<p><b>Vlasta Hus</b> <i>Evaluation and Assessment in the Early Social Science</i></p> <p><b>Huseyn HMV Mirzeyev</b> <i>Teacher-Student Relationship Class of the Role of Psychological Characteristics</i></p> <p><b>Mehmet Ertuğrul Uçar, Ümit Morsünbül &amp; Hasan Atak</b> <i>Need for Closure, Epistemological Beliefs and Identity Styles among Emerging Adults</i></p>	<p><b>Ümmüye Nur Tüzün &amp; Fitnat Köseoğlu</b> <i>Quality of Students' Arguments in an Online Argumentation Environment on a Chemistry Topic</i></p> <p><b>Veysel Çoşğun &amp; Nesrin Özdener</b> <i>The Effects of Using Personalised Short Text Messages in Mobile Learning on Success and Motivation</i></p> <p><b>Özlem Alagül &amp; Ferda Gürsel</b> <i>Journey from "Like" to "Upload": Increasing Disability Awareness through Social Media</i></p>	<p><b>Adile Gülşah Saranlı &amp; Burcu Çabuk</b> <i>Investigating Changes in the Perceptions of Preschool Teacher Candidates on Gifted Preschool Children</i></p> <p><b>Esra Korkut &amp; Gelengül Haktanır</b> <i>The Education Models Developed for Bilingual Children in Early Childhood Period</i></p> <p><b>Gökçe Kurt, Lütfiye Yurtseven &amp; Ayşe Kılıçkaya</b> <i>A Comparison of Turkish and American Children's Illustrated Story Books</i></p>	<p><b>Burhanettin Özdemir</b> <i>Equating TIMSS Mathematics Subtests with Nonlinear Equating Methods Using NEAT Design: Circle-Arc Equating Approaches</i></p> <p><b>Derya Atalan, Cemre Erten Tath &amp; Ergül Demir</b> <i>According to the PISA 2012 Results, Defining the Variables Predicted Mathematical Anxiety Whether or Not</i></p>	<p><b>Adnan Küçüköğlü &amp; Mine Durmaz</b> <i>A Qualitative Research on Becoming A Teacher Educator</i></p> <p><b>Murat Keçe</b> <i>Social Studies Teacher Candidates' Perception towards KPSS</i></p> <p><b>Gonca Sayın, Serkan Keleşoğlu &amp; Yasemin Esen</b> <i>A Scale of Attitudes towards Violence against Women: Validity and Reliability Testing</i></p>	<p><b>Adolescence and Youth Today</b></p> <p><b>Nermin Çelen</b> <i>Ethnic Identity Development in Adolescence</i></p> <p><b>Bilge Yağmurlu</b> <i>Normative Perceptions of Aggression in Turkish Youth</i></p> <p><b>Emine G. Kapçı</b> <i>Communication and Parenting of Adolescents</i></p>

	<b>Dilek İlhan Beyaztaş</b> <i>An Analysis of Students' Perception of Intelligence from Primary School to University</i>	<b>Yasemin Ersöz &amp; S. Nihat Şad</b> <i>Facebook as a Peer Assessment Tool: Does it Work in Visual Art Education?</i>	<b>Gülden Uyanık Balat, Özge Keçecioglu &amp; Türker Sezer</b> <i>The Analysis of the Social Skills of Preschool Children According to the Type of Educational Program They Receive</i>	<b>Ergül Demir &amp; Duygu Anıl</b> <i>Characteristics of 15-Year-Old Students Predicting Scientific Literacy Skills in Turkey</i>	<b>Gökçe Çokamay, Gülendamar Akgül &amp; Ergül Demir</b> <i>Predictors of Teacher Support: An Evaluation on 2012 Data of Program for International Student Assessment (PISA)</i>	
			<b>Süleyman Balcı</b> <i>Counseling Self-efficacy Beliefs of Counselors Concerning Their Roles at School Context</i>	<b>Nagihan Boztunç Öztürk, Kübra Atalay Kabasakal &amp; Eren Halil Özberk</b> <i>An Investigation of the Factors That Affect Turkish Students' Achievement in Mathematics According to the PISA 2012 Results</i>		
				<b>Ezel Tavşancıl, Özge Altıntaş &amp; Cansu Ayan</b> <i>An Investigation of the Programme for International Student Assessment 2012 in Terms of Formative Assessment Usage "Turkey Example"</i>		
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14.00 15.00	KEYNOTE: Dr. Gerry McNAMARA <i>The Changing Face of School Inspection - International Perspectives</i>					
15.00 15.30	Coffee Break					
15.30 16.30	1 <sup>st</sup> Parallel Session Location: ATAUM Chair: Müge Artar	2 <sup>nd</sup> Parallel Session- <b>Turkish Presentation</b> Location: Hasan Ali Yücel Hall Chair: İsmail Doğan	3 <sup>rd</sup> Parallel Session Location: 2. Hall Chair: Tanju Gürkan	4 <sup>th</sup> Parallel Session Location: 3. Hall Chair: Ezel Tavşancıl	5 <sup>th</sup> Parallel Session Location: 5. Hall Chair: Cevriye Ergül	
	<b>Apollon Silagadze &amp; Nino Ejibadze</b> <i>Literary Arabic: Spoken Arabic – Modernization of the Language or Modernization of Teaching the Language?</i>	<b>Baver Taş &amp; Rumeysa Nur Altınışık</b> <i>Technology Readiness of Families of Individuals with Special Needs: A Need Analysis</i>	<b>Aslı Balcı, Zeynep Nur Aydın Kılıç &amp; Esra Ömeroğlu</b> <i>Metaphors of Male Preschool Teacher Candidates about Male Preschool Teacher</i>	<b>Fatma Betül Kurnaz &amp; Ömer Kutlu</b> <i>Determining the Effectiveness of Science Process Skills Program Prepared For Elementary School Grade 4</i>	<b>Taner Atmaca, Tarık Ulusoy &amp; Burcu Bilir</b> <i>Developing Teachers' Instructional Leadership Behaviors Scale</i>	

	<p><b>Asma Kebiri &amp; Fatima Taourite</b> <i>Cooperative Learning: Bridging the Algerian-Turkish Cultural Divide</i></p> <p><b>Ferhat Kardeş &amp; Binnur Yeşilyaprak</b> <i>A Current Approach to Education: Flipped Learning Model</i></p> <p><b>Habib Samadzade</b> <i>Study of Educational Management Status in Iran- A qualitative study</i></p> <p><b>İman Salana Elshawaf</b> <i>Applicability of Literacy Acquisition Predictors in English with Eight- to Ten-Year-Old Arabic- Speaking Children</i></p>	<p><b>Cemile Kara &amp; Neslihan Avcı</b> <i>The Opinions of Academic Staffs, Educators and Prospective Educators on Inclusion Practices: A Qualitative Evaluation</i></p> <p><b>Sultan Örenoğlu Toraman &amp; Hülya Aksakal</b> <i>Examining the Burden of Families with Mentally Disabled Children in Relation to Various Variables</i></p> <p><b>Nurullah Demir, Ali Özhan &amp; Sevgi Gök</b> <i>I Play Therefore I Am</i></p>	<p><b>Mehmet Fatih Aysan &amp; Asil Özdoğru</b> <i>Early Childhood Care and Education in Welfare Regimes of Europe</i></p> <p><b>Mukadder Dilber &amp; Özlem Alkan Ersoy</b> <i>Examining Interpersonal Problem Solving of the Children Age 4-5 and Preschool Teachers' Responsibilities</i></p> <p><b>Nurper Ulküer</b> <i>Early Childhood Care and Education Policy Research within the Post-2015 Sustainable Development Framework</i></p> <p><b>Seda Ata &amp; Berrin Akman</b> <i>The Relationship between Attachment Dimensions and Classroom Management Profiles: An Investigation with Preschool Teachers</i></p>	<p><b>Menekşe Uysal, Halime Yıldırım, Sinem Şenferah &amp; Şener Büyükoztürk</b> <i>Determination of Differential Item Functioning in Research Self-Efficacy Scale</i></p> <p><b>Mübeccel Gönen, Mefharet Veziroğlu, Helen Raikes &amp; İbrahim Acar</b> <i>Home and Classroom Characteristics Affecting Low-Income Young Children's Self-Regulation and Language in Turkey and USA</i></p>	<p><b>Fatmanur Özen</b> <i>Evaluation of Prospective Teachers' Attitudes toward Democracy and Multicultural Education</i></p> <p><b>Hilal Bilgin &amp; Necdet Aykaç</b> <i>An Evaluation of Effective Teaching Characteristics of Instructors According to Students' Opinions (Mugla Sıtkı Kocman University Sample)</i></p> <p><b>Tulin Sener</b> <i>Processes Influencing Democratic Ownership and Participation: Turkish Results</i></p>
16.30 16.45	Coffee Break				
16.45 17.45	<p>1<sup>st</sup> Parallel Session Location: ATAUM-Turkish Presentation Chair: Adil Türkoğlu</p> <p><b>Senar Alkın Şahin, Nihal Tunca &amp; Fatih Kezer</b> <i>Evaluation of the In-Service Training Program Targeted to Assessment and Evaluation</i></p>	<p>2<sup>nd</sup> Parallel Session Location: Hasan Ali Yücel Hall Chair: Ayfer Alper</p> <p><b>Eylem Yalçın İncik</b> <i>Teachers' Technopedagogical Education Competencies, Computer Related Self-Efficacies and Views on the Fatih Project</i></p>	<p>3<sup>rd</sup> Parallel Session Location: 2. Hall Chair: İsmail Karakaya</p> <p><b>Özlem Özer</b> <i>Mathematics Lesson Attainment Test</i></p> <p><b>Yurdagül Günal &amp; Nükhet Demirtaşlı</b> <i>A Pathway to Educational Accountability</i></p>	<p>4<sup>th</sup> Parallel Session Location: 3. Hall Chair: Ahmet Yıldız</p> <p><b>Ş. Erhan Bağcı</b> <i>How Marketisation in Education Changes the Society: Neofeodal Transformation in Turkey</i></p> <p><b>Şakir Çınkır &amp; Gül Kurum</b> <i>To Be Appointed or Not to Be Appointed: Issues, Challenges and Recommendations</i></p>	<p>5<sup>th</sup> Parallel Session Location: 5. Hall Chair: Metin Pişkin</p> <p><b>Ömer Kutlu &amp; Hatice Çiğdem Yavuz</b> <i>The Factors That Play Role in Academic Resilience of Academicians</i></p> <p><b>Ş. Gonca Zeren</b> <i>Comparison of Face to Face and Online Counseling: Client Problems and Satisfaction</i></p>

<p>18.00</p>	<p><b>Nevin Özdemir, Alper Kesten &amp; Pınar Işkın</b> <i>The Effect of Undergraduate Education on the Social Studies Teacher Candidates' Learning Styles</i></p> <p><b>Nilay Türk, Gürcü Erdamar, Tufan Aytaç &amp; Zeynep Arseven</b> <i>The Effect of Gender on the Pre-service Teachers' Attitudes towards Teaching as a Profession: A Meta-Analysis</i></p> <p><b>Kübra Şengül</b> <i>Turkish Language Teachers' Special Field Competencies: A Study of Determination</i></p>	<p><b>Nimet Akben</b> <i>The Effect of Problem Posing Applications on Prospective Teachers' Academic Achievement and Problem Solving Skills in the Chemistry Course</i></p> <p><b>Adnan Karabrahimoğlu &amp; Nazan Karaoğlu</b> <i>Attitude of Medical Students Towards Statistics and Scientific Research</i></p> <p><b>Serap Nazlı</b> <i>Yozgat Police Vocational College Comprehensive Developmental Guidance Program Designing Process</i></p> <p><b>Funda İfakat Tengiz &amp; Yavuz Selim Süral</b> <i>A Portfolio Study with The Students of Medical Documentation and Secretariat</i></p>	<p><b>İsmail Karakaya, Seyhan Sarıtaş &amp; Rana Salmaner</b> <i>Assessment of Performance-Based Tasks within the Context of Statistics Lesson with Multi-Faceted Rasch Model</i></p> <p><b>Feyzullah Şahin</b> <i>Adaptation of the Kaufman Domains of Creativity Scale into Turkish and Examination of its Psychometric Properties</i></p> <p><b>Seher Yalçın, H. Çiğdem Yavuz &amp; Münever İlgün Dibek</b> <i>An Examination of Articles Published in Educational Journals Having Highest Impact Factors: Content Analysis</i></p>	<p><b>Mete Sipahioğlu</b> <i>Neoliberal Policies in Education and Its Affects in Turkey</i></p> <p><b>Tarık Soydan</b> <i>A Policy Analysis on the National Education Ministry's School Administrators Appointment System</i></p> <p><b>Seyfi Kenan</b> <i>Reconsidering the Idea of Educated Person Today</i></p>	<p><b>Ümit Çimen Coşğun &amp; Mediha Sarı</b> <i>An Investigation of the Effects of Rejected Students' Classroom Behaviors on the Classroom Atmosphere and Teachers' Approach to These Students</i></p> <p><b>Volkan Duran</b> <i>The Development of Hypothetico-Creative Reasoning Skills Inventory</i></p> <p><b>Zekeriya Çam &amp; Selahiddin Ögülmüş</b> <i>Relationships between Work Related Flow, Job Satisfaction and Burnout Among Public School Teachers</i></p>
Closing					

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## KEYNOTE SPEAKERS

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Prof. Dr. Üstün Dökmen

**Speech Title:** Evolution of Language, Thought and Education

Dr. Dökmen was born in 1954 in İstanbul. He completed his primary and secondary education in Erzurum. He was graduated from Ankara Cumhuriyet High School. After being graduated from the Department of Psychology, Hacettepe University, he received his master's degree in applied psychology from the same department. He received the title of doctor in 1986, associate professor in 1988 and professor in 1995 from the Department of Counseling and Guidance, Ankara University Faculty of Educational Sciences. He served as a faculty member in Ankara University Faculty of Educational Sciences. In addition to his academic books and articles, he also has poetry books and theatre plays. Dr. Dökmen has made various television and radio programs, and has given conferences in many European countries and Australia so far. He is also the recipient of the Essay Award given by the Writers Union of Turkey in 2008 for his work entitled "Little Things".



Dr. Maritza Macdonald

**Speech Title:** Why Do Cultural Institutions Belong in the Curriculum for Teachers?

Dr. Maritza Macdonald is currently the Senior Director of Education and Policy and the Co-director of the Masters in Arts in Teaching graduate degree program at the American Museum of Natural History (AMNH), the first of its kind in the United States. During her sixteen year tenure at AMNH, Dr. Macdonald has focused on teacher professional development programs, research on the potential contributions and role of the museum in teacher education and partnerships with schools, universities and museums – both in the US and overseas. She represents the Museum in policy-related Science, Technology, Engineering and Mathematics (STEM) education activities, such as the National Commission for 21 Century STEM Education, in Washington DC and the New York State Regents Work Group. Dr. Macdonald received her doctorate from Teachers College, Columbia University with a specialization in Teacher Education and Curriculum Development. She was the recipient of an honorary degree from Bank Street College of Education, NYC, and the Equity Champions Award from the Educational Equity Center.



Assoc. Prof. Dr. Selçuk R. Şirin

**Speech Title:** Can Turkish Youth Compete in the New Economy?

Dr. Selçuk R. Şirin is an Associate Professor in the Department of Applied Psychology in New York University's Steinhardt School. Dr. Şirin's research focuses on the lives of immigrant and minority children and their families and ways to increase professionals' ability to better serve them. Dr. Şirin conducted a major meta-analytical review of research on socioeconomic status and he co-produced the Racial and Ethical Sensitivity Test (REST) and accompanying training program for school professionals. He served as the Research Coordinator for the Partnership for Teacher Excellence project at NYU in collaboration with New York City School of Education. He is the recipient of Teaching Excellence Award from Boston College, Young Scholar Award from the Foundation for Child Development for his project on immigrant children, and Review of Research Award from the American Educational Research Association (AERA) given in recognition of an outstanding article published in education.



Prof. Dr. Aydın Yücesan Durgunoğlu

**Speech Title:** Literacy Development in Children and in Adults: Successes, Challenges and Future Directions

Dr. Aydın Yücesan Durgunoğlu is a Distinguished Global Professor at the University of Minnesota Duluth Psychology Department. She has also served as the department head for six years. She has been awarded the UMD Chancellor's Award for Distinguished Research. She has also been a guest professor at Boğaziçi University. Since 1995, she and her colleagues at the Mother Child Education Foundation have developed and implemented an adult literacy program with two levels that has now reached almost 200,000 people across Turkey. She has also served in the USA on a National Research Council taskforce to review the research base on adolescent and adult literacy. Her research focuses on literacy development in different languages; similarities and differences across languages; oral and written language development in bilinguals and transfer across languages; literacy development processes in children and adults; health literacy; comprehension and production of scientific texts; developing educational interventions guided by research on cognition; cognitive, affective, sociocultural factors and their interactions affecting literacy and other academic achievements.



Prof. Dr. Gerry McNamara

**Speech Title:** The Changing Face of School Inspection - International Perspectives

Dr. Gerry McNamara is a Professor of Education at the School of Education Studies, Dublin City University, Ireland. His research interests include educational evaluation and practitioner research. He is an active member of both the European Evaluation Society and the Irish Evaluation Network. He is currently a Principal Investigator of the E.U. funded International School Inspection Project, and has written widely about school evaluation, inspection and self-evaluation. His next book, *The Changing Face of School Inspection: theories and practices* will be published by Springer in 2015.



Assist. Prof. Dr. Phyllis Swann Underwood

**Speech Title:** Culturally Responsive Practice in the 21st Century: A Universal Cornerstone of Effective Teaching Practices

Dr. Phyllis Swann Underwood is a faculty member in the Florida State University, College of Education, School of Teacher Education where she teaches both graduate and undergraduate Reading courses. She is also serving as a Reading Instruction Specialist for the Reading for Ethiopia's Achievement Developed project funded through USAID and awarded to Research Triangle Institute. Previously, she was a research faculty member at the Florida Center for Reading Research, directing multiple federally-funded grant projects including research examining child-by-instruction interactions in literacy for grades one through five. She also coordinated intervention projects associated with the Reading for Understanding grant, designed to identify and evaluate interventions that are likely to result in substantial increases in students' reading comprehension across a broad range of grades from pre-k to grade five, with a focus on students who are at significant risk of reading comprehension difficulties. Her research interests include the examination of culturally-responsive teaching practices on reading skill growth of early elementary grade students.

## WORKSHOPS

**11 May 2015**

<b>Dr. Ramamoorthi Parasuram</b>	Let us Unmask Autism - I
<b>Prof. Dr. Ali Balcı</b>	Effective School
<b>Dr. Mehmet Kurt</b>	Visual Modeling and Design with 3D Studio Max
<b>Prof. Dr. Betül Ulukol</b>	The First Step on Attitude to Abused Child
<b>Prof. Dr. Halil İbrahim Diken</b>	Gilliam Autistic Disorder Rating Scale-2-Turkish Version Practitioner Certification Course
<b>Prof. Dr. Meral Uysal</b>	Education under Neo-liberal and Neo-conservative Siege
<b>Prof. Dr. İnci San</b>	Drama, Museum and Art History Connections

**12 May 2015**

<b>Dr. Ramamoorthi Parasuram</b>	Let us Unmask Autism - II
<b>Assoc. Prof. Dr. Michael L. Bentley</b>	Connecting Youth to Nature: Activities and Resources Appropriate for PreK-3
<b>Prof. Dr. Aydın Durgunoğlu</b>	Development, Problems, Effective Implementations of Literacy Skills
<b>Prof. Dr. Selçuk Şirin</b>	Writing Academic Article
<b>Dr. Maritza Macdonald</b>	How do Cultural Institutions Participate in the Education of New Science Teachers?
<b>Assist. Prof. Dr. Phyllis Swann Underwood</b>	Culturally Responsive Literacy Practices in the Early Childhood Classroom
<b>Assist. Prof. Dr. Mustafa Sever</b>	Using Phenomenological Design in Educational Researches
<b>Prof. Dr. Hasan Hüseyin Aksoy</b>	Resource Persons and Basic Concepts of Critical Education
<b>Prof. Dr. Halil İbrahim Diken</b>	Responsive Teaching Program Practitioner Certification Course

**THE CONGRESS THEME  
“EDUCATION FOR THE FUTURE:  
ISSUES AND CHALLENGES”**

**SUB-THEMES**

**THEME 1:** Teacher Education for the Future

**THEME 2:** New Directions on Curriculum Studies

**THEME 3:** Early Intervention

**THEME 4:** Inclusive Education

**THEME 5:** Reflections on Educational Psychology

**THEME 6:** Perspectives on Guidance and Counseling

**THEME 7:** Literature and Education

**THEME 8:** Rethinking Education

**THEME 9:** New Approaches in Measurement and Assessment

**THEME 10:** Trends, Challenges and Innovations in Subject Teaching

**THEME 11:** Early Childhood Education

**THEME 12:** Trends in Arts, Drama and Museum Education

**THEME 13:** School Readiness

**THEME 14:** Technology and Education

**THEME 15:** Educational Administration and Supervision

**THEME 16:** Educational Economics and Planning

**THEME 17:** Educational Law

**THEME 18:** Foundations of Education

**THEME 19:** Perspectives on Lifelong Learning

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# **ABSTRACTS**

# **THEME 1: Teacher Education for the Future**

# **A Qualitative Research on Becoming a Teaching Educator**

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## **Aim of the Research**

Universities are increasingly important realm of development of countries and nations. There is rapid increase in the number of universities, especially in teacher training institutions in Turkey. When examined the history of implementations executed by the Council of Higher Education in Turkey with regards to the reconstruction of teacher training institutions process, finding solutions to the problems in the framework of teacher training system in our country as in all the international platforms is focused argument for specialist in the field. Behind the rationale for the new regulations, Higher Education Council, determined that Faculties of Education, which were misconstrued, faced with similar problems and away from the main objective and they are insufficient to meet the needs of country's teachers in aspects of both qualitative and quantitative for almost fifteen years now (YÖK, 1998a:14). An effective cooperation between Faculty of Arts and Sciences and The Faculty of Education has not been able to carried out and repeats in terms of the business have emerged between Faculty of Arts and Sciences and The Faculty of Education in many cases. The assumptions was favored on the fact that the impact on the employment of unqualified teacher educators in the faculties of teacher education and development of these institutions. As matter of fact, these people were not related to educational science or pedagogy at all. In addition to this, the academic staff graduated from "teachers' school" who deprived of masters studies has stir up the matter (Erginer 1995a, 1995b, Erginer 1997).

Also there is little research on identity development of teacher educators; the faculties of education, we face very limited studies on the subject of teacher training (Yüksel, 2010). In the studies which examine the restructure of faculties of education (Erginer 1995a, 1995b, Erginer 1997), the concern of non-existence of specialist educators in the field of education and the lack of educational programs to educate them is still continuing. Bestor (1953) stated that teacher educators with no teaching experience were employed in the faculties of education in the universities. He further noted that the teacher trainees who were taught vocational courses could not benefit from their teacher educators. Bestor criticized that teacher trainees working in the educational units should take some vocational teaching courses. The problems cited by Bestor existed in American Educational setting in 1953 and the striking fact is that the same problems did not still change in Turkish context. Therefore, the teacher educators profile and their standards should obligatorily be discussed and improved. The aim of this study is to explore the profile of teacher educators within the framework of international standards. Therefore, the main objective of the study is to determine the profile of teacher educator within the international standards. In other words, the paper analyzes a way of knowledge conceptualization and practice of teaching and thereby shaping what it means to be a teacher educator. The following section covers the viewpoints

of teacher educators working in the faculties of education in Turkey and how they conceive being a teacher educator. Finally, the paper compares the teacher educators' viewpoints with the standards of international teacher educators and opens the similarities and differences into the discussion.

### **Methodology**

30 participants who are teacher educators in the Faculties of Education joined in the research. The semi-structured interviews were designed and used to collect the data. However, some of the participants opted to provide written answers to the research questions. The questions intended to be used in the negotiation process were sent to some participants electronically and all the answers were received. The basic criteria set by the researchers to determine the participants in the study is that they must complete their education in teacher training or educational sciences and hold their Ph.d degrees and they must also be actively working as a lecturer in the faculties of education. Because of that it is a qualitative research and data collection tool consists of open-ended questions, the method of open coding was implemented with content analysis in the evaluation of the collected data.

### **Findings**

The basic finding obtained from this research is that teacher educators have diverse viewpoints concerning the concept of teacher educator and there is not a common perception about it. The other important finding of this research is that there is a common view about the main function of teacher educator, together with many qualities, should be "a role model" for teacher candidates. Similar criteria are used for the selection of teachers (teacher educators), however one of the noticeable views is that the criteria are not sufficient for the teacher selection process.

### **Results and Implications**

In conclusion, the research has shown that teacher educators do not have common views about teacher training in the faculties of education and "the concept of teacher training" has not been placed in our country yet. The striking result is that no competence is sought in the selection of instructor to faculties of education, and it reflects teacher training process negatively. Within the selection criteria of members of education faculties, essential competencies for teacher educators could be researched in the further studies.

**Keywords:** Teacher educators, teacher's profile, standards of teacher education, teacher training.

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# **The Perceptions of Pre-Service Science Teachers about Content and Language Integrated Learning**

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Content and Language Integrated Learning (CLIL) is a relatively new approach in teaching involving both language teaching as well as content learning. According to Marsh (2002) CLIL can be defined as dual-focused classrooms where a language other than the students' first language is used as a medium of instruction. CLIL has common principles with bilingual education, content-based instruction, immersion and other similar approaches; however, the diversity of CLIL stems from its being an integration of both language and content, without putting emphasis of either (Coyle, 2005; Coyle, 2007). Another distinctiveness of this approach is that CLIL incorporates a foreign language rather than first or second language while immersion programs in which usually a second language is used (Lasagabester & Juan, 2009). According to Coyle (2007) CLIL cannot be considered for compulsory education but it can be used in all contexts of education including kindergarten, vocational and professional education and so on. However, Dalton-Puffer (2011) defines CLIL "as an educational approach where curricular content is taught through the medium of a foreign language, typically to students participating in some form of mainstream education at the primary, secondary, or tertiary level"(p.182). Contrary to Coyle, Dalton-Puffer labels CLIL as a method for mainstream education.

There are two aims in a CLIL classroom; the first one is to teach the content of a subject such as history, geography, biology, science. Along with this the second aim is to teach a language. The lesson plan is designed in such a way to include both aims. Coyle draws a 4Cs framework in a lesson these are content, communication, cognition and culture. She puts the content at the center of a successful learning. Besides language is another important aspect of a lesson. CLIL approaches from a communicative perspective to the language teaching. Language is learned through using it actively in classroom. Another aspect of a CLIL lesson is cognition which requires the lesson to be cognitively challenging for the learners. The lesson should lead the learners to think using higher order thinking skills defined by Bloom. In addition to content, communication, and cognition CLIL lesson has a cultural aspect as well. Studying in a foreign language is an effective tool to develop international understanding in today's pluricultural world.

CLIL is gaining popularity in Europe as well as in all over the world. This study investigates the situation in Turkey which is a partner of Europe. The aim of this study is to determine the views of pre-service science teachers' views on the use of CLIL in science teaching. With this purpose in mind 30 pre-service science teachers who are currently studying at a state university in Turkey are interviewed. In the selection of participants simple random sampling method is used. Two criteria are taken into account in the sampling; a) the participants were voluntary, b) they have an average level of English proficiency. The following steps are

incorporated in this study; i) selection of participants, ii) informing participants on CLIL, iii) implementation of a sample CLIL lesson on science, iv) interview with the participants after the implementation.

A lesson plan for a sample course was designed by the researchers. The course subject was taught by one of the researchers through this method so that the students would gain full understanding towards the implementation of this method. The data for this study were collected through a semi-structured interview form which is developed by the researchers. In the development of the interview form the body of literature is reviewed, and according to the expert-views the reliability of the form is calculated. Inter-rater reliability coefficient was calculated and the results revealed a high agreement rate. The points of disagreement were discussed between the researchers and a common ground was found. In the analysis of the data NVivo 9 program is used. Through this program descriptive analysis was conducted and categories were formed. The results were presented in tables and charts. A model which reflects the general views of the pre-service teachers' views on CLIL approach was formed through NVivo program using the themes.

The results of the study revealed that the pre-service teachers found CLIL as enjoyable and interesting. The participants reported that this method is useful in both teaching of languages and science subjects. However, they added that lack of proficiency could be a problem in teaching through this method. After all, the implementation of this method requires a great deal of time and effort. This can make the applicability of CLIL difficult. This study shed light on future studies in Turkey to integrate language teaching in teaching of other classroom subjects. The study concludes with implications for teaching through CLIL and for further studies.

**Keywords:** Content and Language Integrated Learning, Language Education, Science Education, Pre-service Teacher.

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# Metaphors of Male Preschool Teacher Candidates about Male Preschool Teacher

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Society loads different characteristics, attitudes and duties to females and males. It is possible to see the reflections of norm and values in also the occupational preference of individuals based on gender categorising male and female in several fields of social life (Dökmen, 2012). Females generally focus on the works related and convenient to family affairs while males are motivated to works and occupations bearing high level of status, requiring decision making (Terzioğlu and Taşkın, 2008). It may be possible to see that when some occupations such as pilot and surgeon are mentioned a man will appear in the people's mind while others like nurse, hostess or preschool teacher remind females and such an occupational differentiation may be evaluated to be the reflection of gender mainstreaming into occupational preference (Bhasin, 2003; as cited in Tarihci Delice, 2006). Perception of preschool teaching to be an occupation unique only to females may sometimes cause a social pressure on males who (will) prefer the occupation (Fu and Li, 2010; Hedlinand Aberg, 2013). In this respect, even though the number of males preferring preschool teaching occupation is consistently increasing, this may be accepted to be considerably limited compared to females. However, the participation of males in preschool education as teacher in the preschool period when sexual identity development begins may have great contribution to the development of positive male role model for children and avoidance from sex discrimination at an early stage of life (Harris and Barnes, 2009). It is important to study the preschool teaching occupation which brings females in minds by considering the views of limited number of male students attending this university department and to determine their perception of male preschool teacher in order to solve the present problems in the occupation and give a new breath and perspective to the field. The study is conducted by considering phenomenological study design among qualitative study methods. Phenomenological design focuses on the facts we are aware of but have no detailed and deep understanding of them (Yıldırım and Şimşek, 2011). According to such a design, metaphors as a powerful pedagogical tool are used to express, understand and alter the mental images preschool teacher candidates have related to some certain facts during teacher education. Metaphors are giving chance to knowledge as a tool which enables human to understand nature and environment, to distract meaning through some certain comments from objective reality which seems to be meaningless and to load sense to life and experience (Yıldırım and Şimşek, 2011). By considering such a definition, the aim of this study is to reach metaphors male preschool teacher candidates produce related to the concept of male preschool teacher and conceptual categories into which these metaphors are divided. Sample of the study is composed of male preschool teacher candidate

studying in 3<sup>rd</sup> and 4<sup>th</sup> grades of the Department of Preschool Teaching at the universities of Atatürk and Gazi. Two types of questionnaire survey form are used as the data collection tool; one asking the demographic characteristics of participant students and the other determining their perception of the concept of “male preschool teacher” and used in metaphor studies by including the definitive fill – in – the – blanks sentences like “male preschool teachers like ..... Because he .....”. Male preschool teacher candidates are asked to express their written views by concentrating on only one metaphor and giving about 30 minutes. Main data source is the responses of male preschool teacher candidates. Totally four stages are followed in the analysis of data; e.g. denomination stage, where the replies of male preschool teacher candidates related to the concept of “male preschool teacher” and used to determine their metaphors are examined closely; elimination and treatment stage where metaphors are revised and categorised by their subjects, sources, and the relationship between their subjects and sources; review and categorisation stage where metaphors are categorised considering the relationship between subject and source of metaphors and the metaphors with similar properties and meanings are placed in the same categories, and validity and confidence provision stage where the categories formed are checked for their accuracy by expert teaching staff (Saban, 2008). Results and conclusions are given in details after the completion of data analysis.

**Keywords:** male preschool teacher, male preschool teacher candidate, metaphor

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# Elementary Mathematics Teacher of Mathematics for Visual Literacy Scale's Development

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The aim of the study is to develop an effective, reliable, and useful scale which is capable of measuring the visual maths literacy of prospective maths teacher. Regarding the views of experts and the relevant sources, a Linkert Scale that is consist of 60 Linkert Items is made up. According to the experts' opinion, an outline scale is prepared. This scale is applied to 325 prospective teachers who study maths at Education Faculty of Republic University in Sivas and Ziya Gökalp Education Faculty of Dicle University in the first term of 2014-2015 Education Year. After analyzing the results, a Linkert Scale, consist of 37 items, is prepared. In this scale, of 37 items are gathered under 5 factors an total variance rate of these factors are announced 44.246 %. Cronbach-Alfa stability rate is announced as 904. As a result an effective and reliable visual Maths literacy scale for candidate maths teachers is developed.

## Aim

In this study it is aimed to develop an effective reliable and useful scale which is capable of measuring the visual literacy of prospective maths teachers. Following aims are the sub title of this main purpose:

1. Is the results of visual maths literacy scale reliable in measuring the level of visual Maths Literacy?
2. Is the results of visual maths literacy scale is valid in measuring level of of the visual Maths literacy?
3. How is the factor variety of the items of the visual maths literacy scale?
4. How is the relationship between the prospective Maths teacher and the subscales?

## Methods

This study was conducted by researchers carries descriptive features. In order to determine the Visual Math Literacy for Elementary Mathematics Teachers at Work, Visual Math Literacy Scale (GMOÖ) was developed. At this point, Dicle University Ziya Gökalp Education Faculty and Cumhuriyet University Faculty of Education who study in 2014-2015 Education 325 mathematics teachers (1., 2nd, 3rd, and 4th grade teachers) applied to the draft questionnaire, the final form scale is obtained.

## Findings and conclusions

Determination of the perception of the visual literacy, math, students are expected to contribute greatly to the improvement of mathematics and geometry success. Student-centered development of educational programs, it is important to determine students' perspectives for the implementation and evaluation. Moreover, the close relationship between the success of

any issue of self-efficacy (Pajares, 2001; Senemoğlu, 2009) These reasons are further refine the practical benefits of this research.

Validity of the Visual Math Literacy Scale; Audio of the materials that make up the scale in order to ensure the content validity of the scale Mathematical Literacy Perception whether related to primary school mathematics curriculum and students in academics and the National Education site about the suitability of the level of has consulted teachers working. Factor analysis was used for construct validity. Accordingly, agents of the scale; "Visual perception", "geometric space", "spatial intelligence", "but embody" and "pattern", are grouped in five factors. These factors illustrate the 44.246's% of the total variance. Measured to ensure face validity requested thoughts clearly expressed in the article, are written in accordance with the subject matter. Both internal consistency coefficient of the scale called the visual mathematics literacy scale ( $\alpha = .904$ ) seems to be a reliable in terms of both item-total correlations measurement tool.

The reliability of Visual Math Literacy Scale; In this part of the study aimed to determine to what degree the visual mathematics literacy scale reliable. Alpha coefficient for the whole and the subscales were calculated to test the reliability and correlation of the two halves of the test. The alpha coefficient was calculated on the reliability study of the scale investigate whether the expression of a whole shows a homogeneous structure of all matter. (Kalaycı, 2010, p. 405). A whole scale with statistics made based on this point is tested whether the expression. Two semi-test reliability of single-double of the test substance, halftime-sonyar or neutral as the relationship between the two halves of the test divided into two identical half-motion Spearman Brown is calculated by correlation coefficient calculated for the entire test using the formula (Büyüköztürk, 2010, p. 170). Two semi-randomly generated test reliability when calculating the two co-half scale, the correlation coefficient was calculated. Visual Math Literacy scale of this data proves the validity and the reliability of both.

As a result of elementary mathematics teachers for Visual Math Literacy Scale can determine the perception of visual literacy, math, valid, reliable, and said to be a useful scale. In addition, to determine the visual literacy levels of the other branches of mathematics teachers and student teachers can easily use this scale is also considered.

**Keywords:** Prospective Maths Teacher, Visual Maths Literacy, Maths teching

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## **Analysis of Differentiated Learning Strategies Used by Teachers**

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When creating classes in schools, academic status of students, capabilities and requirements usually are not taken into account. Classes are formed heterogeneously. Most of the teachers accept that the students are different from each other in terms of their academic needs, interests and learning styles (Edward, Carr ve Sieger, 2006). Recent researches suggest that even though the teachers know that not all the students are same and their needs are different from each other, the number of the teachers taking the differences into consideration and practicing efficiently is very little (Gable at all., 2000; Guild, 2001).

The teacher has to meet the changing and increasing demands of the whole class. The teacher has to know what the necessary qualifications, individual differences and the characteristics of the group of the age. Although it is known that; it is impossible to meet the requirements of learning styles formed by the differences of the students fully, it is suggested to take the individual differences into consideration while teachers are selecting their teaching methods and reinforcements to be used, motivating the students and communicating with the min schools (Gozutok, 2007:89). Therefore teacher should try to know the students from all aspects (cognitive, affective, psychomotor and social) and take these into account while planning and implementing the course. That will enable the teacher to be successful. However it is seen that teachers have not adapted their methods to these suggestions.

In the competency areas of the teacher defined by the Ministry of National Education, the definition of the personal and professional values- professional development is like that; “the teacher sees and values the students as individuals. He/she strives for the highest level of learning and improvement of them by taking the social and cultural differences and their interests into the consideration.” Again in this area, another definition for the subcompetency area is like that; “the teacher has to recognize that each of the students is unique and act according to their characteristics” (MEB, Teacher Competencies, 2008).

Differentiated instruction is accepted as an affective teaching method that meets the requirements of the teachers and the students (Tomlinson, 2001a; Edward, Carr ve Sieger, 2006). The aim of the differentiated instruction is to maximize the potential of the students learning. Briefly differentiated instruction is a flexible method that the teacher can adapt the programme and instruction according to the capabilities, pre-learning, and readiness levels of the students (Hall, 2002; Tomlinson ve Mc Tighe, 2006).

Differentiated instruction is sensitive to determine the students levels in learning process and what they need to learn and supports the arrangement of instruction according to this. In another words, differentiated instruction suggests the students’ different ways to study on the subject to be learnt, to make the information meaningful and to form the products. In this way, students are tried to learn the subjects and concepts clearly by using different methods (Heacox, 2002: 10-11).

It is continuously said that teacher has to take the students differences, readiness levels and learning needs into account but it is not known in which level the teacher has accomplished this. The aim of the survey is to make detailed analyses of the difficulties met by the teachers using differentiated instruction methods, trying to reach the requirements of the program by taking the differences and level of the students into account.

Research was conducted using a combination of qualitative and quantitative methods with mixed pattern. Both of the methods have been used for interpreting the primary school Maths and English teachers' methods of knowing, understanding and using the differentiated instruction. In the research, a questionnaire was used to determine the differentiated instruction strategies of the teachers and if there is a relationship between the qualifications such as the sex, department they graduated and their preferences of using the strategies. Results were analyzed. In the qualitative analysis of the process, it was aimed to analyze the learning atmosphere that supporting or preventing of using the differentiated instruction methods and the factors that make them use these methods. The qualitative part of the research was shaped by grounded theory approach and in the analysis; the methods of the grounded theory were used as a basis.

In the quantitate part of the research it was tried to reach all Maths and English teachers working in Etimesgut and Sincan districts, sample was not taken. Four teachers using differentiated instruction methods were determined by examining the questionnaire results of 304 teachers reached. To determine the teachers "extreme cases sampling" method was used. The lessons were observed by videorecording 64 hours totally, and then an interview was conducted with each of the teachers.

Quantitative data was examined using Spss 21, qualitative data was examined using Maxqda 11 data analysis programmes. The findings showed that the qualifications of the teachers are the fundamental determinant for doing the differentiated instruction; a qualified teacher prefers the differentiated instruction for personal satisfaction and achievement expectations. The analysis process is continuing.

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# Opinions of Pre-Service Teachers about Innovation Application Areas and Innovation in Education

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In recent years, innovation has been one of the most popular words in science and technology. The word innovation derives from Latin word “innovare”, which means “to do something new and different” (Can, 2007:7). In the literature, words such as “yenilik”, “yenilikçilik”, “yenileme” are used as its Turkish counterparts (Yılmaz et al., 2014;Göl and Bülbül, 2012). Rather than the newness itself, innovation refers to the result, an economic and social system based on change and differentiation (Elçi, 2006).

In the literature, there have been studies on national innovation(Sungur, 2006), indicators of innovation (Özbek ve Atik, 2013), innovation system approach (Işık ve Kılınç, 2012), innovation culture (Gökçekuş, 2008; Gökçekuş ve Yontar, 2008), school administrators’ attitude towards (Top, 2011), innovation management and problems they face (Boydak Ozan ve Karabatak, 2013; Bülbül, 2012), innovation management (Adams, Bessant, ve Phelps, 2006; Tidd) and innovation tendency (Yılmaz ve diğ., 2014; Akın-Kösterelioğlu ve Demir, 2014). However, there have not been a study that investigates opinions of teachers and pre-service teachers on innovation in education.

The heart of innovation is the human resource (Karaata,2012). The significance of teachers and pre-service teachers for innovation and innovation culture is obvious considering the role of the educational system in creating specialties for innovation and the position of the said human resource in the labour market. In this context, we believe that teachers’ and pre-service teachers’ approach towards and opinions on innovation in education will contribute to the literature in the sense that it will allow for innovations in educational organizations and contribute to innovation management. This study aims to find out pre-service teachers’ opinions on innovation application areas, innovation in education and types of innovation applied in education. For this purpose, the opinions of pre-service teachers’ have been taken and the following question have been tried to answer:

- What could be innovation application areas according to pre-service teachers?
- Is innovation possible in education according to pre-service teachers?
- In what categories innovations can be made in education according to pre-service teachers?

In this study, the purpose is not to make changes on variables, but to demonstrate the existing situation using the data collected from the participants through the survey method. Therefore, we used the scan pattern (Fraenkel, Wallen and Hyun, 2012).

The participants of the study consisted of 108 pre-service teacher who attended various departments/programs (Physics, Computer, Mathematics and Science Education) of faculty of education of a public university in 2014-2015 academic year. A form consisting of open-ended questions was prepared for data collection purposes. As a result of the evaluation the

literature and based on expert opinions, the form consisting of 8 open-ended questions was prepared. Within the scope of this study, the data obtained from two questions regarding application areas of innovation and whether innovation was possible in education were explored to this end.

It was found that the pre-service teachers participated in the study stated that innovations could be made in 13 different areas: such as Health (20.4%), Education (33.3%), Marketing (19.4%). Answers of pre-service teachers on the question “Is innovation possible in education? How? Please explain” were separately examined. The fact that only about half of the pre-service teachers participated in the study thought innovation in education was possible is quite interesting. As a result of the assessment of the answers for how innovations could be made in education, it can be said that the pre-service teachers thought that making innovations in education was possible in the Technological Product category.

In this study, it has been found that pre-service teachers were not sufficiently informed about innovation in education. It is necessary to raise the innovation related awareness level amongst pre-service teachers, who will take on the task to raise a qualified work force, so that they have knowledge about how innovations can be applied to education.

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## Where To Now? Issues in Preparing A1 (AB Initio) Learners for Language Use Beyond the Classroom Context

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This paper presents a discussion of issues connected with preparing *ab initio* (A1) foreign and second language learners for language use beyond the classroom. In particular it focuses on the teaching of Turkish, Russian and Irish in an Irish university setting as test cases for issues that may be experienced in other language contexts. Turkish and Russian are clearly foreign languages in Ireland. However, they are both now among the large number of languages spoken by immigrant groups in the country. The Irish language, however, is a minority indigenous language, which is also the first official language of the Republic of Ireland. One common issue affecting the teaching of these three language teaching in Dublin is that there is no readily accessible local target language speech community in which learners can immerse themselves and practice what they have learned in the classroom. *Ab initio* learners are often unaware of the small groups of target language speakers which exist in their locality. If they are aware, they may not be prepared to seek them out. There is, therefore, little linguistic or cultural support for their learning efforts. While this is perhaps common to most foreign language learning contexts, it is unusual in the context of a national language like Irish. This paper is based on a review of existing research and commentaries on these issues, and represents the first stage of a collaborative empirical project to be carried out by the three authors.

The project is rooted in the idea that most language teachers and course syllabuses assume that (1) opportunities for target language use are readily available to learners, and (2) learners are prepared to seek out those opportunities. In circumstances where one or both of these assumptions are incorrect, courses and methods with communicative aims may prove difficult to implement effectively. However, in contexts where there is no clear target language group for learners to engage with outside the classroom, teachers and learners may identify members of the learners group as the target community and the classroom as the target language environment. These issues have been highlighted previously in the specific case of Irish (Ó Laoire, 2000; Singleton, 1987) and it we argue that a similar approach is necessary in relation to other less commonly spoken/taught languages in Ireland. An important consequence of this solution is that the classroom community only exists for learners as long as they are attending the course. Where then do learners turn when this community disappears? We suggest that careful selection and creation of classroom activities and appropriate teaching methodologies

may provide learners with the skill set necessary to make desired use of the target language inside and outside the classroom (Little, 2007); this may include accessing non-traditional contexts for target language use, such as the Internet (e.g. Klimanova, 2013).

Our discussion of these issues draws on recent research conducted with learners in these contexts which has focused on three important issues: learner needs, learner motivation and learner autonomy \*(Flynn, 2014; Flynn & Harris, forthcoming; Karababa & Karagül, 2013; Singleton, 1987), as well as on the wider foreign and second language learning literatures focused on these areas . We argue that, while these three language contexts may differ from one another in important ways, they are similar in that beginning learners of these languages in Ireland all experience the difficulty of finding a well defined and accessible speech community which would present them with opportunities for using the target language outside the classroom. For teachers in such contexts, the difficulty therefore lies in teaching basic communicative skills without the expectation that the learners will have many opportunities to practise them outside the classroom. This presents a real challenge for communicative language teaching and may be cause for a reinterpretation of such methods in certain contexts \*(Brumfit, 1986; Flynn, 2012; Singleton, 1987). Furthermore, in the absence of a clear target language community in which that can practice the language, learner autonomy may play a significant role in supporting *ab initio* learners' attempts to identify and exploit opportunities for language learning and use beyond the classroom.

**Keywords:** Foreign language learning, communicative language teaching, learner autonomy

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# Changes in the Self-Efficacy Beliefs of Pre-Service Teachers through a Teacher Certification Program

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Substantial research has focused on teachers' self-efficacy beliefs since this issue is perceived as important and closely linked to preparation of qualified and competent teachers. Bandura, the theorist of self-efficacy concept, defines the term as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (1997, p. 3). More specifically, Bandura (1997) hypothesized that self-efficacy level influences an individual's magnitude of adherence to a certain goal and persistence while trying to achieve this goal. In line with Bandura's description, Ashton (1984) defines teaching efficacy as teacher's belief about to what extent s/he can successfully affect students' achievement. A well defined line of research conducted on the self-efficacy suggests a high correlation between teachers' self-efficacy and students' achievement (Ashton & Webb, 1986; Ross, 1992), teacher motivation (Midgley, Feldlaufer, & Eccles, 1989), and levels of novelty in instruction. The educational policies concerning the issue of teacher preparation and certification programs change across world depending on teacher shortage or political decisions. For Turkey, despite the high number of unemployed teachers, teacher certificate programs prepare students graduated from faculty of fine arts as teachers. This opportunity gives chance to such students to become teachers specifically majoring in English language and mathematics. Across the nation, some of the universities offer teacher certification of one-year or even a six month compact program providing access to basic courses given to pre-service teachers at education faculties with the goal of supporting teacher candidates' on pedagogical aspects. Although, these alternative certification programs offer the same courses, there are severe criticisms on the issues of the quality of education, the duration of the program, the policy of government. All these issues provide evidences for further investigations of self-efficacy of teacher candidates enrolled to a teacher certification program. Therefore, this study hypothesis that teacher candidates' self-efficacy beliefs changes throughout a certification program, specifically the study investigates the research question of "how certification program affect teacher candidates efficacy beliefs on teaching?". A phenomenological research of qualitative designs was utilized to reveal the students' beliefs on teaching before and after a certification program with a convenient sampling. The students were enrolled to mathematics teacher certificate program and almost half of the students had experienced teaching prior to the certificate program. Focus group interviews with almost 4-5 teacher candidates were conducted to gather information on their teaching efficacy. The sample consists of 44 students, aging from 22 to 40 years. The semi-structured interviews lasted almost 20 minutes with probing questions deepening the phenomena. Each group's interview session was video recorded, and then transcribed verbatim. Data analysis continued with taking out the key codes and themes from the transcriptions. Findings obtained from students' responses indicate that authentic field experiences which hold practices of mini-lessons taught to small groups of collegiate peers on campus and formal courses of field experience have direct and positive effect on students' efficacy beliefs related to teaching. As Woolfolk and Hoy (2000) pointed out teacher candidates had quite positive efficacy beliefs throughout their course work and

before the formal field experiences. However, as students experienced the complex teaching environments on campus or in schools, their teaching efficacy beliefs slightly dropped because of the feeling of the seriousness of the teaching process. Moreover, findings indicated that one semester-long practicum prior to formal teaching may be considered as not enough for students in order to develop and maintain efficacy for effective teaching. Students commonly stated that their efficacy on teaching was strengthened at the end of the courses integrating the field experience and courses given to teach teaching methods. Although they mentioned the weakened efficacy during the courses, they generally had consensus on; at the end of the certificate program they felt better themselves for teaching in formal educational settings. A group of students additionally mentioned that they confronted some challenges during field experience so they need to prove to themselves to the idea that they can be successful in teaching. Such situations have the possibility to contribute to establishment of stronger efficacy beliefs. This study underlies the significant role of teacher education programs in grounding teacher candidates' efficacy beliefs. The study shed light on the development of efficacy beliefs which are suggested by Bandura as mastery experience, vicarious experience, social persuasion, and physiological state. It is concluded that strong efficacy beliefs are related to authentic practices and field experiences. Although, such pathways offering teacher certification has effect on developing teaching efficacy, the content and field experience either on campus or in schools should be extended to prove that the program is competent in developing efficacy beliefs. Additionally, it is strongly suggested that the program can be facilitated by opportunities of challenges in which students can cope with and overcome the problem. Provided that the program is a blend of what the studies indicate to be effective in supporting and developing a strong sense of teacher efficacy, it will ensure high teaching efficacy for all students. Some of the suggestions emerged from this investigation are; researchers may conduct studies to compare carefully the teaching self-efficacy of students of education faculties and such certificate programs. Our work-in-progress attempts will address many other issues and direct valuable recommendations for further studies.

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# **Investigating EFL Teachers' Students' Conceptions of Professional Teacher Identity Through Metaphor Analysis**

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The growing outstanding appeal of the notion of identity across a broad diversity of fields over the past years has been reflected in an intense focus recently in the body of literature on the concept of “professional teacher identity” which plays a crucial role in the classroom practices of language teachers.

Traditional mainstream research regarding beliefs about teaching and learning, for the most part, depends upon cognitive depictions with pre-set assumptions comprising of responses to questionnaires or interviews with pre-set questions (Kalaja, 1995). However, these approaches have been criticized for failing to gather beliefs from real social contexts. To address this limitation, “causal explanations as actually performed in discourse, or stretches of talk” (Kalaja, 2003: 90) are required and this has called forth the introduction of discursive research on beliefs about teaching and learning, focusing in particular on the concept of teacher identity.

Teacher identity depends upon the beliefs about teaching and being a teacher, conceptions that are constantly formed through experience. Before the mid-1990s, research on teacher professional identity focused chiefly on how teachers were behaving in the classroom. From then on, the internal world of teachers embodying their perceptions, ideas and values came into prominence (Ornstein, 1999). In this respect, considering the complexity of identity, it is not easy to describe one's identity when asked to do so in many words.

In recent years, Lakoff and Johnson's (1980) theory of metaphor provides a basis for describing everyday cognitive structures. In their milestone work, Lakoff and Johnson (1980) claim that our conceptual system is metaphorically structured; as a result, the way we think and the things we experience are to a large extent a matter of metaphor. Therefore, metaphors are regarded as a feature of language use within teaching and learning environments, and they can be used to gather deeper insight into teacher's perceptions and our comprehension of teacher's beliefs, behaviors and actions.

The current study intended to investigate how foreign language instructors are viewed as “teachers” by their students. In the present study, data were collected by means of semi-structured interviews from 200 students of 10 Turkish language teachers instructing English as a foreign language at Düzce University. Data were analyzed using metaphor analysis, which is a qualitative research methodology related to content analysis, to unveil the students' perceptions towards their teachers' professional identity. The analysis of the 200 metaphorical expressions of students gave rise to the emergence of 14 major themes named “teacher as agency of patience”, “teacher as authority”, “teacher as eager beaver”, “teacher as entertainer”, “teacher as expert”, “teacher as guide”, “teacher as Jekyll and Hyde”, “teacher as interest arouser”, “teacher as knowledge provider”, “teacher as mystery”, “teacher as neophyte”, “teacher as nurturer”, “teacher as patchwork”, and “teacher as trier to patience”.

In line with the findings of the present study, it can be concluded that metaphors are a precious and inspiring way for teachers to talk about their professional identities and give insights into themselves. Through metaphor analysis, teachers reflect on their own personal and professional beliefs and teaching philosophies, and then they go through their own behaviors and reflect on how these beliefs and theories affect their actions in the classroom, which helps teachers to understand the teaching context and self-as-teacher better. Moreover, another striking implication for language learning and teaching invoked by the findings of the present study could be to emphasize the dialogue and collaboration between the teachers and their students. Developing such networks and allowing opportunities for interaction between teachers and their students, the effectiveness of teaching can be enriched, which not only enhance teachers' professional growth, but also affect the quality of the education. On the whole, the findings show that it must be born in mind that as stated by Belenky, Clinchy, Goldberger, and Tarule (1986: 18) "visual metaphors encourage standing at a distance to get a proper view." Hence, reviewing the organization of the classroom proceedings, uncovering the deeper structures of students' perceptions, and examining their own personal philosophies help teachers enhance their growth towards being a professional teacher.

**Keywords:** ELT, Teacher Identity, Metaphor Analysis

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# Teachers' Technopedagogical Education Competencies, Computer Related Self Efficacies and Views on the Fatih Project

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Education is one of the most fundamental resources for a society to enhance its economic, social and cultural development. Educational institutions, as one of the institutions both initiating and directing the social change and development, have to follow technological developments to use these technologies and to teach how to use them (Akkoyunlu, 1995). The positive outcomes of the researches conducted on integration of technology in education and using technology within the process of teaching learning process (Başçiftçi and Sunay, 2011; Chang, 2002; Çelik and Çevik, 2011; Haertel and Means, 2003; Renshaw and Taylor, 2000) have lead many governments to create programs to realize the integration of technology in their schools (Hew and Brush, 2007; Çakır and Yıldırım, 2009). Just like in Turkey and other countries, the integration of information and communication technologies in education is addressed as a state policy and various studies were conducted in this direction. The last of these studies is "Movement to Increase Opportunities and Technology" or "FATİH Project". Schwere and Jaramillo (1998) emphasized that the fact that the information technologies are integrated and used in the classroom activities needs to be continuously examined and international comparisons must be done. In order to efficiently realize the FATİH Project on planned time, examination and researches undoubtedly should be done. From this point, the purpose of this study is determine the technopedagogical education competencies, computer related self-efficacy and views on the FATİH Project of the teachers working in the high schools.

## Method

The study was designed in survey model. Survey model was suitable for studies aimed at determining the current situation as it stands (Karasar, 2006). In this study, both quantitative and qualitative research approaches were used in the data collection and analysis processes.

The study group of the research consists of 190 teachers working in the high schools in the district of Yenişehir in Mersin in the 2012-2013 educational year.

Technopedagogical Education Competency Scale and Computer Self-Efficacy Scale were used as the data collection tool in the research. In addition, a question form consisting of 5 open-ended questions was developed by the researcher in order to reflect the views of participants as they are. While preparing the open ended question form; it was paid attention not to give any hints to those who would answer the questions. Such an approach helps obtaining thorough and original answers (Best & Kahn, 1989). The open-ended question form was presented to 5 academicians who are expert in the field of educational programs and teaching. Experts evaluated data collection tool in the sense of fitness for purpose, comprehensibility of instructions, content and way of answering. Necessary arrangements were made according to feedback obtained from field experts.

In the analysis of quantitative data, frequency, percentage, mean, t-test, anova and pearson correlation statistics were performed. The content analysis was used in the analysis of qualitative data.

## Results

As a result of the research, it was found that the technopedagogical education competencies of teachers were at a medium level and that the technopedagogical education competencies of the teachers who have an educational experience of 11-15 years were more than the others. Teachers' perceptions of self-efficacy on computer who have an educational experience of 0-5 years are more than the other teachers. No significant difference was found between gender on seniority of teachers and competency level towards technopedagogical education and self-efficacy perceptions on computer. One significant positive correlation was found between teachers' competency towards technopedagogical education and their self-efficacy perceptions on computer.

As a result of the qualitative data, it was determined that most of the teachers define the FATİH Project as integrating technology with the instructional process and that they obtained the information about the project through media and in the courses provided by the Directorate of National Education. The teachers see the opportunity to enable audio-visual activities in terms of the teaching process and provided fast access as the positive aspects and see the fact that the students might use to watch films-videos, to listen to music which is not the purpose of the project as negative aspects of the project. The teachers also stated that teachers should be able to use the computer and the smart board in order to become successful, they should be eager and interested and that in-service trainings should be organized by the Ministry of Education and the Directorate of National Education.

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# **A Scale of Attitudes Towards Violence Against Women: Validity and Reliability Testing**

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Violence against women is one of the most common social problems across the world and in Turkey and the most important violation of human rights against which we need to combat. Both in public life and family life, violence causes women to be devoid of their right to exist in social and economic life, to experience physical and psychological problems and to get injured or even to lose their lives. Furthermore, the physical, emotional, economic and social consequences of violence against women have negative effects on not only women but also their children, families and the larger community.

Violence against women should be acknowledged as a matter of human rights, which needs to be approached from a holistic perspective and handled with the cooperation of all (public and private) sectors. In this respect, the Ministry of Family and Social Policies of Turkey, the main institution responsible for ensuring cooperation and coordination among stakeholders, has developed the Struggle with Violence against Women National Action Plans 2007-2010 and 2012-2015, which confer responsibilities to universities for the fulfillment of Turkey's relevant international commitments. One of the main objectives of both Action Plans is "to raise public awareness and enable mental transformation related to gender equality and domestic violence against women with a view to eliminating negative attitudes and behaviors causing and inciting violence against women". In this framework, some of the objectives that refer to universities as cooperative institutions (2007-2019) are as follows:

- to incorporate into university curricula the subjects of gender equality and violence against women in regular and formal education programs,
- to include gender equality and violence against women in undergraduate programs of related faculties, including education, law, medicine and communication.

According to Action Plan 2012-2015, it is highlighted that there is a need to "include the subject of gender equality, violence against women and domestic violence in pre- and post-graduation education programs, particularly in all faculties and schools related to health and social sciences in universities". In this respect, teacher-training institutions are required to assume significant duties and responsibilities.

Teachers that have developed awareness and sensitivity to violence against women are likely to be effective actors in social transformation. Based on this argument, this study sets out to

identify the attitudes towards violence against women of prospective teachers, studying in the faculties of education.

## **Method**

### ***Model***

This is an applied study, where the point of departure is to develop a scale in order to identify university students' attitudes towards violence against women.

### ***Population and Sample***

In the first stage, 200 students, sharing similar characteristics with participants in the sample, will be asked to complete a pilot form of the scale of attitude towards violence against women. In studies related to scale development, it is underlined that the number of participants should be greater than the number of items (Cohen, Monion and Morrison, 2007) and even that the number of participants should be five times greater than the number of items in the scale (Tabachnick and Field, 1996, Tavşancıl, 2002). The scale initially included 42 items for the pilot study. That is why 200 students are selected to collect data for scale development.

In the second stage, the scale will be administered to 800 students. Exploratory factor analysis will be performed in line with the data obtained. According to the results of exploratory factor analysis, the scale will then be administered to 1000 students for confirmatory factor analysis.

Students to participate in this study will be selected from amongst first-year students. The students are selected from amongst first-year students with the assumption that they have not taken the courses offered in upper classes, which are likely to affect their attitudes.

### ***Development of Data-Collecting Instrument***

#### ***Writing Items and Drafting the Pilot Form***

A form comprising 42 items was initially developed, based on a survey of literature, with a view to developing an instrument for measuring attitudes towards violence against women. Expert opinion will be asked about appropriateness, clarity, comprehensibility and representativeness of these items before necessary changes are made on the form. Expert opinion will be asked for each of 42 items. A draft scale will be obtained as a result of this procedure. 5-point Likert scale will be used in the form. The choices and the points corresponding to these choices are as follows: 5=Totally Agree, 4=Agree, 3= Undecided, 2=Disagree, 1=Totally Disagree.

#### ***Data Analysis***

After the data entry process is completed, frequency tables will be created to check whether there is any inaccuracy in data entry. It is particularly important for impartiality of the study that there is no missing (lost) data (Erkuş, 2012 p. 63). Furthermore, extreme values will be transformed into Z-score and controlled for each item. Reverse scoring will be used for the items with negative meaning.

### ***Analysis of Pilot Study Data***

The pilot form will be used to collect data in the university setting in 2014-2015 academic year spring semester after the aim of study is explained to the participants. The participants will need about 25 minutes to complete the form. Exploratory factor analysis will be performed for data collected in the pilot study in order to determine scale factors. As a result of this, the items with difference below factor loading of .10 – accepted as factors with low communalities – are extracted from the scale. The scale obtained as a result of the pilot study will be revised for the main study.

### ***Validity and Reliability Analyses***

Assumptions will be checked, and exploratory factor analysis will be used for construct *validity* of the scale. Confirmatory factor analysis will be performed and fit indexes will be interpreted in order to test the accuracy of sub-dimensions obtained in the exploratory factor analysis. Cronbach's Alpha – one of the coefficients of internal consistency – and split-half reliability coefficient will be calculated to test the reliability of the scale and its sub-dimensions and dimensions.

**Keywords:** Violence against women, attitudes, prospective teachers

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# Predictors of Teacher Support: An Evaluation on 2012 Data of Program for International Student Assessment

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Teacher support is an important subject for both students' academic achievements (Song, Bong, Lee and Kim, 2014) and meeting their developmental needs (Çokamay, Çavdar and Çok, 2014). Teachers are supporters for providing interpersonal communication (such as communication with family), giving feedback related to homeworks, and providing communication in school environment (Hilgendorf, 2012). Some studies reported that adolescents need more academic support than emotional support (Song and others, 2014) as well as other studies which state that emotional support is a predictor of academic achievement (Tennant, Demaray, Malecki, Terry, Clary and Elzinga, 2014). Adolescents tend to perceive their peers as the primary social support source and perceive less social support from their teachers (Iglesia, Stover and Liporace, 2014). On the other hand, in this developmental stage, teacher support was found to have positive effects on happiness level, life satisfaction and resolution of peer conflicts of students (Wang, Wang, Gu, Zhan, Yang and Barnard, 2014). In addition, some studies found that teacher support has an effect on social-emotional well-being of students (Tennant and others, 2014) and it has a mediator role in the relationship between victimization and depression levels (Mihalas, Witherspoon, Harper and Sovra, 2012).

One of the most important international educational research considering teacher support as a variable is PISA. Turkey has been participating PISA since 2003 regularly (Yıldırım, Yıldırım, Yetişir and Ceylan, 2013).

The aim of this study is to investigate the significant predictors of teacher support which is an important variable supporting the developmental areas of students by using PISA 2012 Turkey data.

## Methods

This research is conducted as a basic research and secondary analyses were performed on PISA data. Basic research, the simplest way of research concept, are theoretical studies that aim to add new information to the existing knowledge (Karasar, 2012).

The population of PISA 2012 Turkey application consists of about 1 million 15-year old students. The sample consists of total 4892 15-year old students which are identified according to NUTS Level-1.

In this study, secondary analyses were performed on PISA 2012 Turkey Students Questionnaire data. PISA student questionnaire has three different forms as A, B and C. After examining the questionnaire forms, since the maximum numbers of affective characteristics were found in Form B, the analyses were limited to be performed on Form B. The total number of students who were applied Form B in PISA 2012 in Turkey is 1598.

Multiple Linear Regression Analyses was performed to predict the teacher support as perceived by students. To identify the variables which will be included in the analyses, the index variables or variables with standardized values among PISA 2012 Turkey Student Form B were examined in terms of basic assumptions. At the end of the preliminary analyses, 5 out of 37 variables were included in the regression analyses to determine their relation to teacher support. These variables are (1) sense of belonging to school, (2) mathematic self-efficacy, (3) Instrumental Motivation for Mathematics (4) attitudes towards school: learning outcomes and (5) attitudes towards school: learning activities.

## **Findings**

According to the results of analyses, 5 variables were determined as predictors of teacher support through regression modelling. All the variables in the regression model have moderate positive correlations with teacher support. The model explained 13% of total variance in teacher support.

The variables in the model according to their explanatory value are Sense of Belonging to School ( $\beta = 0,19$ ), Instrumental Motivation for Mathematics ( $\beta = 0,14$ ), Mathematics Self-Efficacy ( $\beta = 0,11$ ), Attitude Towards School: Learning Outcomes ( $\beta = 0,06$ ) and Attitude Towards School: Learning Activities ( $\beta = 0,05$ ).

## **Conclusions**

As a result, a significant regression function with 5 affective variables was produced. As an affective characteristic, teacher supports can be significantly modelled with some other student affective characteristics.

The result of the present study could be helpful in both conducting educational activities in schools and investigating the ways of increasing teacher support which is important in students' development and well-being. In future new models can be conceptualized exploring the teacher variable as predictor of some other variables such as student's academic achievement.

**Keywords:** teacher support, PISA, regression, affective characteristics

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# **Review of Problem Posing Skills of Mathematics Students Who Receive Pedagogical Formation Training**

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The 2005 and 2013 curriculum emphasize mathematics teaching-learning based on problem posing as the focus of mathematics activities at the schools; and underline the importance of developing analytical and critical thought skills of the students as well as using a language unique to mathematics to communicate (Ersoy, 2004). Mathematics teacher is the one who ultimately shoulders the responsibility of implementing mathematics curricula. Therefore, the teacher is expected to instill in his/her students the skills to overcome potential problems they may face in real life. The development of the students' problem solving skills, on the other hand, requires them to have problem-posing skills in the first place (Turhan and Güven, 2014). Problem posing, in turn, entails the discovery of new questions to be investigated or discovered about a given case (Akay, 2006). In this context, the individuals with problem-posing skills can, using the available information, produce new information, and formulate their own problems (Turhan and Güven, 2014). The designing of applicable learning-teaching processes by the teachers is particularly crucial in terms of instilling the problem-posing skills in the students. Against this background, this study aims to analyze the problem posing skills among mathematics department students who receive pedagogical formation training.

The study was carried out employing a case study methodology, with a descriptive perspective. The participants comprise 46 mathematics department students who receive pedagogical formation training at a respected faculty of education. The data was gathered using a personal information form, and the "Mathematics Teaching and Problem Posing" test developed by Korkmaz and Gür (2006). The test covers 4 distinct cases. The first one entails the modification of a given open-ended problem statement so as to develop an adaptation of it. The second case is about trying posing problems using the specified numbers and operations. In the third case, the prospective teachers were asked to pose solvable problems, using a given set of mathematical equations. Finally, the participants were given mathematical input where the pivotal element is missing, and asked to pose a problem using the information available to them. The data underwent content analysis, and were assigned flags of 'problem', 'not a problem', 'no answer' accordingly, upon the review of each problem posed by the participants.

The findings may be summarized as follows: The students were able to pose problems relatively easily for some of the 4 cases, while for others, they experienced significant difficulties. 23 students were able to pose problems for the first case, while 14 left the question without an answer, and the problem posed by 9 were unacceptable. In the second case, 36 students were able to pose problems, while 3 posed none, and 7 posed incorrect ones. In the third case, 44 students successfully posed problems, 1 did not pose any, and 1 posed an

incorrect one. For the fourth case, 21 students were able to pose problems, 9 left the question unanswered, and 16 posed incorrect problems.

The problems posed by the students and categorized as acceptable problems were then reviewed and coded for individual cases. For instance, in the first case, 2 of the students who posed a problem introduced additional information to the given set; 3 modified the values assigned while keeping the conditions and the subject matter; 8 kept the values and conditions, but changed the subject matter; 6 kept the values and subject matter, but changed the conditions; 2 changed the context or the formulation of the problem; 1 altered the values and the subject matter while keeping the conditions, and 1 altered both the values, subject matter, and the conditions. In the second case 12 out of those who posed a problem used all data available while 14 did not use all the operations; 5 did not use all numerical values; 1 used neither all the operations nor all the numerical values; and 4 introduced new data to the set. In the third case, 35 out of the 44 students who were able to pose problems used the whole data, while 9 posed the problem by introducing additional data. In the fourth case, 5 of the students who posed a problem made full use of data; 3 had incomplete use of data and an altered subject matter; 3 posed a problem with a different subject matter; 1 used altered data and subject matter; 5 introduced additional data; 1 made incomplete use of the data available, all the while introducing additional data; and 1 made incomplete use of the data available.

The majority of the students were relatively successful in posing problems by using mathematical equations in addition to the given set of numbers and operations. However, in the cases where they were required to modify a given open-ended problem statement so as to develop an adaptation of it, or to pose a problem with a set of mathematical data and information with the pivotal element missing, they were less successful.

The underlying cause may be low level of analytical thought and reasoning skills development and difficulties in using the language of mathematics among the students. These findings may lead to a recommendation to add new courses to the pedagogical formation training programs in order to provide the required skills, and to extend the length of the formation training accordingly.

**Keywords:** pedagogical formation; mathematics students; problem posing skills

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# **Transforming Mathematics Education for Sustainability: An Initial Attempt**

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As environmental, social, economic challenges are increasing worldwide today, education plays a central role to produce solutions for sustainability (Sterling, 2001). Education for sustainable development (ESD) prepare individuals to cope with these problems that threaten our planet and find sustainable solutions (UNESCO, 2005). ESD is not a subject of one discipline instead it could be integrated to every discipline and each discipline can provide knowledge, skills and values for ESD (Mckeown & Hopkins, 2003). There are almost 70 million teachers in the world and they hold a great potential to shape our future for sustainability (Mckeown, 2012). Therefore, mathematics education could not be disconnected from sustainability issues even sustainability has taken little attention in mathematics education (Renert, 2011). More recently some studies focused on opportunities to use physical and biological environments for teaching and learning science and mathematics (Paige, Llyod & Chartes, 2008). A significant shift in curriculum and the way of teaching science and mathematics are needed to deal with complex real world problems. Therefore, transdisciplinary approaches integrating science, mathematics, society and environment are important for problem solving (Paige, et al., 2008). Furthermore, integration activities, such as integration of science and mathematics could increase students' success in the lessons (Kurt & Pehlivan, 2013). However, these integration studies are still inadequate (Kurt & Pehlivan, 2013) and also integration of mathematics education and sustainability is a neglected area even though many connections could be done (Renert, 2011). Therefore, this study focused on how to integrate sustainability to mathematics education. As an initial attempt, this study aimed to investigate the opinions of pre-service mathematics teachers and their readiness for integration sustainability to mathematics education.

## **Research Design**

Basic qualitative research (Merriam, 2009) was used in this study and qualitative data were collected through 8 open-ended questions that were prepared by the researchers. The questions measured sustainability understandings of pre-service mathematics teachers and their opinions how to integrate sustainability to mathematics education. For example, they were asked "In your opinion, how sustainability and mathematics education could be connected? Please explain in an example". 39 final year pre-service mathematics teachers attended in the study. Data were analyzed through content analysis. Mathematics and sustainability concepts and their integration were picked up in participants' answers. Additionally, participants were asked whether they were ready and willing to integrate sustainability to mathematics education.

## **Findings**

Based on the findings of the study, firstly, preservice mathematics teachers identified sustainability in terms of continuity of natural resources (24), reuse/recycling (2), and

sustainable use of natural resources (13). That is, they are aware of environmental aspect of sustainability. When they were asked about mathematics subjects that could be appropriate for sustainability integrated mathematics, two subject categories were emerged. Furthermore, they mentioned about the integration of sustainability in mathematics with respect to three categories.

### **Conclusion and Suggestions:**

Most of the participants were aware of the importance of the sustainability in integrating to mathematics. Especially, they emphasized two mathematics subjects, namely, statistics and problem solving that could be used in integration activities. Related to integration, in their examples, they focused on usage of natural manipulatives in mathematics exercises, creating problems including sustainability, and using statistics in sustainability issues. For example, one of the participants gave an example related to using of plastic bottles in forming coordinate system to make mathematics more concrete for students and increase their awareness about reusing of plastics. On the other hand, 13 of them had no idea about using of sustainability in mathematics. Among 39 participants, 30 of them said that they took some elective sustainability courses during their final year. They also noted that those courses contributed to their both personal and professional development and increased their environmental awareness. Even though 12 of them had no idea about how to integrate sustainability to mathematics education, other participants stated that they could use sustainability integrated mathematics activities in their future students. In this way, students will figure out mathematics which will become more concrete via natural manipulatives and sustainability examples. In conclusion, pre-service mathematics teachers hold a potential to use sustainability topics in their mathematics classes. In order to increase their awareness and professional development about integration studies, it is recommended that they take more sustainability courses during their education. Besides, university educators should encourage them to integrate sustainability topics in mathematics during their methods of teaching mathematics courses. Thus, preservice mathematics teachers could grow their future students who are more aware about the problems in the planet and students could understand mathematics more easily through the examples from their real life.

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## **The Use of Pre-Service Teacher-Generated Case Studies in Teacher Education: Maximizing the Practicum**

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It has now been established that novice teachers feel a type of “reality shock” (Veenman, 1984) or “praxis shock” (Flores & Day, 2006) when the ideals that they formed during their initial teacher training are often changed by the realities of classroom life as they begin to teach in a school (Farrell, 2008). Novice teachers can be better prepared for the reality shock only if the pre-service training they receive is reconciled with the classroom realities. Practicum lies at the heart of pre-service teachers’ knowledge building experiences and professional development (Tang, 2004) as pre-service teachers observe real teaching/learning contexts, carry out reflective tasks and practice both micro and macro teaching skills. Yet, the related literature indicates that in most cases the teaching practice is not sufficient to link theory and practice and the expectations of the pre-service teachers are hardly met (Korthagen, Lougran, & Russel, 2006; Seferođlu, 2006). Given the fact that much of the contact with the real classroom life takes place during practicum, the methods that are applied in this course deserve attention.

This study attempted to explore the value of using pre-service teacher-generated case studies to enhance learning during practicum from the perspectives of the pre-service teachers. Thus, the study aimed to answer the following research question: 1) What are the pre-service language teachers’ thoughts on the use of pre-service teacher-generated case studies during the practicum course?

The participants of this study were 21 pre-service English language teachers from the English Language Teaching Education Program at a university in Istanbul, Turkey. Their ages ranged from 20-23. Participants were selected based on purposive sampling. For ethical considerations, written consents were collected from the participants and participants were promised anonymity for their participation.

The English language teaching program requires pre-service language teachers to take courses in the areas of English language and applied linguistics. Through the end of the program, during the seventh and eighth semesters, pre-service teachers take their practicum course which involves visiting schools regularly to observe and teach classes. During practicum, pre-service teachers were asked to create five case stories detailing a significant episode of their school-based practicum observations. The stories focused on any aspect of learning and teaching practices, interaction with students or cooperative teachers, or the school environment. Pre-service teachers were also asked to develop discussion questions addressing the central dilemma of their stories. Each week completed stories were shared and discussed in class. Prior to the writing of the case stories, pre-service teachers attended a one-hour seminar on how to create case stories. Consecutively, pre-service teachers wrote reflection essays on their opinions about the effectiveness of the use of pre-service teacher-generated case studies in teacher education. Pre-service teachers later attended a focus group interview conducted to explore their learning experiences in relation to the use of case studies during practicum. The focus group interview was audio recorded and transcribed verbatim.

Methodologically, data analysis was carried out following the grounded theory procedures (Strauss & Corbin, 1990) which enabled the researcher to code and fracture the data through identification of patterns within reflection essays and interview transcriptions.

The findings of the study showed that pre-service teachers acknowledged that the use of pre-service teacher-generated case studies were effective as contexts of the stories were very similar to student-teachers' future teaching contexts. The findings also showed that pre-service teachers valued the use of case studies during practicum because discussing these case stories as real-life accounts helped them to consider potential problems in a supportive and reflective environment. According to the main findings of this study, pre-service teacher-generated case study provides an effective method to enhance pre-service teachers' learning during practicum. Based on the analysis, we argue that integration of case-based methodology in practicum has the potential of maximizing learning of pre-service teachers by representing an effective link between theory and practice observation-reflection.

**Keywords:** pre-service English language teachers, practicum, case-based method

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## **Scrutinizing Practicum for a More Powerful Teacher Education: A Longitudinal Study with Pre-Service Teachers**

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In initial teacher education, school-based practicum lies at the heart of pre-service teachers' knowledge construction and professional development (Tang, 2004). With the help of doing observation of real teaching/learning contexts and carrying out tasks under the supervision of university lecturers and cooperating teachers, pre-service teachers can develop their teaching knowledge and skills and reflect on their beliefs, which support their cognitive learning and development (Cheng et. al., 2010). This study aims to explore the role of school-based practicum in promoting pre-service English language teachers' professional development with the use of a longitudinal design in combination with qualitative methods. To achieve this aim the research was guided by the following questions: (1) How do pre-service English language teachers reflect upon and evaluate their own teaching practice before practicum? (2) How do pre-service English language teachers reflect upon and evaluate their own teaching practice after practicum? (3) Are there any detected changes in pre- and post-practicum reflections and evaluations of pre-service English language teachers over time?

The participants of this study were 15 pre-service English language teachers from the English Language Teaching Education Program in the Faculty of Arts and Sciences in Istanbul Bilgi University. Their ages ranged from 20-23. Participants were selected based on purposive sampling. For ethical considerations, written consents were collected from the participants and participants were promised anonymity for their participation.

The same data collection methodology was adapted during Year 3 spring semester and Year 4 fall semester of the BA programme, in other words, before and after the practicum to gain a deeper understanding about the learning stemming from the school-based practicum. During their Year 3 courses, pre-service teachers first had a chance to watch their own video recordings of microteaching sessions which were integrated in microteaching component of three core courses offered, namely Grammar in Teaching English as a Foreign Language (TEFL), Reading and Writing in TEFL and Young Learners in TEFL. Later, they wrote self-evaluation reports on video recordings and attended focus-group interviews conducted between student teachers and university supervisors. The same participants took their school experience course as a requirement of the practical application of the programme in the next semester. They spend one day in cooperating schools and completed an array of tasks. At the end of the semester, pre-service teachers had a chance to re-watch their micro teaching video recordings from the previous year and re-write self-evaluation reports on it in a retrospective manner. Consecutively, they attended a focus group interview conducted to explore the insights of those student-teachers before and after practicum by comparing their own teaching from a retrospective lens. The interviews were audio recorded and transcribed verbatim. Data analysis was carried out following the grounded theory procedures (Strauss & Corbin, 1990)

which enabled us to code and fracture the data through identification of reflective chunks within self-evaluation reports and interview transcriptions.

The comparisons of data obtained through focus group interviews and self-evaluation reports written on microteaching video recordings before and after the practicum revealed that the detected components in the data, such as generating interest in the class, giving feedback and instructions, maintaining students' participation, and using body language etc., did not change before and after the practicum, however, the quality of the contents of those components has improved in relation to the awareness of student-teachers' on teaching practice in the second phase of the study at the end of the practicum. The findings further revealed that though it is mentioned in the first reports that microteaching has a facilitative role for student-teachers given that it is very similar to the real teaching conditions in spite of lacking real target audience, the second reports pointed out that student-teachers questioned the reality of microteaching by referring particularly to their practicum experience. The main finding of this study have refined our understanding of the role of practicum and pointed out the pedagogical implication which arises the need for an integration of theoretically based knowledge provided in universities with the experience-based knowledge gained at practicum (Darling-Hammond, 2006). Additionally, it can be suggested that course work and clinical work should be interweaved at an earlier stage of teacher education curriculum.

**Keywords:** pre-service English language teachers, practicum, video-based reflection

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## **Development of The Personal and Professional Competence Perception Scale Towards Lifelong Learning**

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Today, many European countries have entered in a new and a rapid process of reconstruction in their teacher training systems within the frame of common understanding, principles, and approaches also presented by Bologna process. The trends which have been effective and prominent in teacher training process since 1990's are being discussed and it is stated that expanding teacher candidates' pre-service training processes with the concept of lifelong learning is one of those trends (Fenwick, 2001). In line with these views, Turkey has also made some arrangements in its teacher training system with the concept of lifelong learning. The most important one of those arrangements has been to determine the essential Qualifications of Teaching Training and Educational Sciences Basic Field in "Turkey Higher Education Qualifications Framework" (THEQF), which is formed on the basis of European Qualifications Framework for Lifelong Learning (EQF-LLL). As in other areas, the qualifications of this field has been associated with those of National Qualifications Framework of the European countries, their level descriptors have been determined, and teacher candidates' 'knowledge', 'skill', 'personal and professional competence' in their undergraduate level have been created for lifelong learning. Even the expression "developing a positive attitude towards lifelong learning" has taken its place in "learning competencies", which is a sub-title of 'personal and professional competencies' (THEQF, 2011). Then, what is expected from "Higher Education Qualifications Framework" (HEQF) and teacher training programs is to train teachers who have lifelong learning competence and who can adapt it to all the areas of life after graduation. So, they will be able to be a model for their students with their personal and professional competencies and train individuals in this direction. However, at the point of effectuation of these expectations, it is a matter of curiosity at what level teacher candidates' perception related to these competencies is. In this regard, it is quite important that literature has a scale which can be used in determining teacher candidates' perception related to personal and professional competencies to lifelong learning. It has not been come across with a measuring tool to serve this purpose in Turkey. Therefore, in this study, it has been aimed to develop a measuring tool which will enable to measure teacher candidates' personal and professional competencies towards lifelong learning in a valid and a reliable way.

The study was conducted on four different working groups consisting of teacher candidates in 2013-2014 academic year in spring term. In the study, an expert was consulted for content and face validity, and as for the construct validity of the comments made from the measurement, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were applied. As a result of the EFA, a structure consisting of 18 items and 4 factors was achieved, which describes the %61.64 of the total variance. The resulting factors were named as "Working Independently and Taking Responsibility Competence", "Field-Specific and Professional

Competence", "Learning Competence" and "Communication and Social Competence". While determining the scale items and naming the sizes, personal and professional competencies identified for teacher candidates in Turkey Higher Education National Qualifications Framework which was created within the framework of European Qualifications Framework for Lifelong Learning were based. The findings obtained from the CFA showed that the structure with 18 items and four factors related to the "Personal and Professional Competence Perception Scale" (PPCPS) towards lifelong learning had adequate fit indexes. Moreover, within the scope of concurrent validity, "Effective Lifelong Learning Scale" (ELLS), developed by Günüç, Odabaşı and Kuzu (2014), was made use of. This scale is a kind of an assistant tool to evaluate an individual's success in lifelong learning and the availability level of features to enable him an effective lifelong learning. For the concurrent validity, the correlation between teacher candidates' perception related to personal and professional competence and their level of effective lifelong learning was calculated. With the results obtained from the correlation analysis, it was clear that the concurrent validity of the comments made on the measurements of the PPCPS was ensured.

The reliability of the measurements obtained from the sub-scales of the PPCPS were controlled via Cronbach Alfa, composite reliability, and test-retest methods, and it was determined that calculated reliability coefficients are within the acceptable limits. In order to determine the distinctiveness of the items in the scale, corrected item-total correlation and %27 sub-upper group comparisons took their places. The findings obtained from the item analysis showed that all the items in the scale are distinguishing.

Based on these findings, it can be stated that the PPCPS is a scale which produces valid and reliable measurements, and it can be used to measure teacher candidates' perceptions related to personal and professional competence towards lifelong learning.

**Keywords:** Lifelong Learning, Personal and Professional Competence, Scale Development, Validity, Reliability

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## Two Distinct Perspectives on Ratios: Additive and Multiplicative Relationships Between Proportionally Related Quantities

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Ratios and proportional relationships are core concepts of elementary and secondary mathematics education (e.g., Kilpatrick, Swafford, & Findell, 2001; National Council of Teachers of Mathematics, 2000) and provide the foundations for diverse topics such as linear functions, slope, geometric similarity, and probability. In contrast to the large body of research on the proportional reasoning of students (e.g., Karplus, Pulos, & Stage, 1983; Noelting, 1980a), there is a small body of literature focusing on teachers’ reasoning of proportionality. In these relatively few studies, in-service and prospective teachers are found to have constrained proportional reasoning and to perform poorly on proportional relationship tasks other than missing-value problems (e.g., Harel & Behr, 1995). In order to teach ratios and proportional relationships well, teachers have to possess such an understanding themselves. As a result, there is a critical need for studies that investigate teachers’ understanding of ratios and proportional relationships.

The purpose of this study is to investigate how pre-service teachers’ formation of additive and multiplicative relationships support and constrain their understandings of ratios and proportional relationships in terms of quantities. With such a motivation, the conceptual structure for this study is framed by Vergnaud’s (1983, 1988) *multiplicative conceptual field* that places ratios and proportional relationships at the center of many interrelated topics such as multiplication, division, fractions, slope, trigonometry, ratios and proportions, and linear functions. Moreover, the theoretical framework of this study is based on Beckmann and Izsák’s (2015) mathematical analysis of ratios and proportional relationships combining multiplication, division, and proportional relationships with two perspectives on ratios (Table 1).

*Table 1. Overview of Multiplicative Relationships* (Adapted from Beckmann & Izsák, 2015).

$M \cdot N = P$

$(\# \text{ of groups}) \cdot (\# \text{ of units in each/one whole group}) = (\# \text{ of units in } M \text{ groups})$

$M \cdot N = x$ [Equation A] Unknown product, multiplication	$M \cdot x = P$ [Equation B] “How many in each group?” division	$x \cdot N = P$ [Equation C] “How many groups?” division
$x \cdot y = P$ [Equation D] Inversely proportional relationship	$x \cdot N = y$ [Equation E] “Variable number of fixed amounts” proportional relationship	$M \cdot x = y$ [Equation F] “Fixed numbers of variable parts” proportional relationship

Beckmann and Izsák (2015) extended previous literature by identifying two perspectives on ratios and proportional relationships that parallel the partitive and quotitive meanings for division as well as the definition of multiplication.

Because this study was based on explaining possible cause-effect relationships, an *explanatory case study* was used. Also, multiple cases were selected to improve generalizability and external validity of the research (Gay, Mills, & Airasian, 2008). The study was conducted with three pairs of pre-service teachers from the middle-grades teacher education program at a large university. They were recruited based on their performance in a previous course on number and operation. Two semi-structured hour-long cognitive interviews with each pair were videotaped. An example task used in the study was

“A peach punch was made by mixing 3 cups of peach juice with 2 cups of grape juice. What other amounts of peach juice and grape juice can be mixed to make a mixture that has exactly the same taste?”

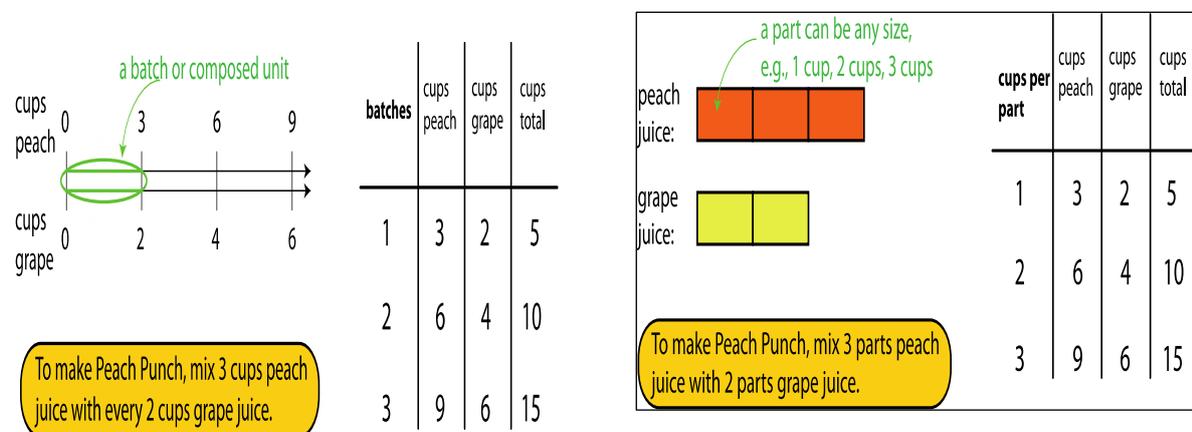


Figure 1: Two Perspectives on Ratios: Multiple Batches and Variable Parts

The findings of this study suggest new lines of research for ratios and proportional relationships. Past research documented students and teachers’ consistent difficulties with forming multiplicative relationships between proportionally related quantities but, there was no study in the literature investigating the relationship between students or teachers’ formation of additive and multiplicative relationships and their use of the two perspectives on ratio, that are key concepts of the *multiplicative conceptual field*.

In this presentation, I will present findings from the study about ways that teacher candidates’ use of additive and multiplicative relationships supported and constrained their understanding of ratios and proportional relationships in terms of quantities. One finding was that pre-service teachers’ reasoning about ratios depends on the extent to which they formed additive and multiplicative relationships. In particular, pre-service teachers who resorted to additive relationships between quantities in comparison to multiplicative relationships struggled to maintain two distinct perspectives on ratios. Hence, an emphasis on multiplicative relationships is critical in ensuring a robust understanding of ratios and proportional relationships. Finally, I will suggest that mathematics courses for future teachers of middle grades programs should be designed to deliberately support multiplicative relationships and prevent future teachers from focusing on additive relationships between proportionally related quantities.

**Keywords:** Ratios and proportions, additive and multiplicative relationships, pre-service teachers

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# **Turkish Language Teachers' Special Field Competencies: A Study of Determination**

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The aim of the study is to determine the view of the Turkish Language teachers in regard of "Special Field Competencies of Turkish Language Teachers". Data collection tool was applied to 579 Turkish language teachers working in 12 provinces (İstanbul, Çanakkale, Aydın, Bursa, Ankara, Adana, Nevşehir, Zonguldak, Giresun, Kars, Elazığ, Şanlıurfa), each of which is a province from 12 area units according to statistical area units determined by Turkey Statistical Institute, the case was determined in its own terms through descriptive survey means.

Descriptive general screening model based on the quantitative data as a part of deductive method. The population of the research is composed of Turkish language teachers working in primary schools in 12 provinces, each of which is a province from 12 area units according to statistical area units determined by Turkey Statistical Institute. The Turkish language teachers, who work in the primary schools in the provinces which are selected for population, are determined as the sampling of the research.

## **Data Collection Tools**

### **Personal Information Form**

This form contains eight questions including information like Turkish language teachers' genders, the faculties they graduated.

### **"Special Field Competency Survey" for Turkish Language Teachers**

While developing this data tool, the study called "Teacher Competencies: General and Special Field Competencies for Teaching as a Profession" is used as a source. In this respect, the survey includes 5 competence fields about special field competences of Turkish language teachers, 25 sub-competences, and 165 performance indications related to these sub-competences.

### **Analysis of the Data**

When determining if there are any differences among groups formed according to the variables, Levene's homogeneity test, Independent samples t-test, one-way analysis of variance, Post-Hoc Scheffe test from multiple comparison methods and when the homogeneity is not met, Mann Whitney U (MWU) test which is suggested ( Büyüköztürk, 2006: 145) as an alternative test for unrelated two samples and Kruskal Wallis H test (KWH) for unrelated k-sample.

## Results

Turkish teachers ,

- 1 . Overall average of competence in specific areas was found to be 03.22 . This shows that they are “ partially competent “ in terms of their competence in specific areas ,shaped within the broad framework of ensuring their professional development in Turkish.
2. It was discovered that they were “competent in-general ” in planning and organizing the process of teaching Turkish.
3. It was discovered that they were generally “ partially competent “ in developing students’ language skills.
4. It was discovered that they were generally “ partially competent “ in monitoring and evaluating students’ development in language.
5. It was discovered that they were generally “ partially competent “ in collaborating among school , families and society.
6. It was discovered that they were generally “ partially competent “ in ensuring professional development in Turkish.
7. It was discovered that women have a higher average than men do, in monitoring and evaluating students’ development in language , in collaborating among school , families and society and in ensuring professional development in Turkish.

## **A Qualitative Inquiry: Pre-service Teachers' Stories on Their Teaching Practicum Process**

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One of the important aspects of teacher education programmes is school experience including teaching practice (practicum). Teaching practice is recognized as one of the most important aspects of a teacher education (Farrell, 2008; cited in Goh and Matthews, 2011). With this experience, teacher candidates are expected to integrate the theoretical knowledge they are taught and practical experience. Student teachers need to learn many things in a real life atmosphere and therefore they need to have experience of teaching in schools as Cope and Inglis (1997) stated. Student teachers might have the various pedagogical experiences such as planning, teaching and assessment that take place during this period. During teaching practice process, student teachers experience the complexity of teaching during practice under the guidance of one or more associate teachers and are mentored by teacher educators from the university through online discussions and observation of teaching (Starkey and Rawlins, 2012). As Grootenboer (2006) stated that a significant aspect of teacher education programs is the school experience, often referred to as teaching practice, practicum or student teaching. Practice teaching (practicum) in teacher education constitutes a major component of the professional education and the development of pre-service teachers before they go on to the actual teaching profession (Çelik, 2008) therefore training prospective teachers through practicum is a crucial part of the teacher education programs in all the educational systems in the world. Many studies have been conducted on teaching practice in related literature. By these studies, researchers have tried to increase understanding of the value of the practicum to student teachers from various perspectives ranging from the preparation, actual participation, and the learning outcomes of the practicum as Goh and Matthews (2011) stated. Research on teaching practice has focused on the views, practices, and attitudes of stakeholders of teaching practice. Some of them have focused on student teachers whereas some others focused on the views of other stakeholders such as teacher educators and mentors. Review regarding teaching practice also highlights that this issue has been investigated both qualitatively (by using different data collection tools such as reflective journals, diary, interview) and quantitatively (by using data collection tools such as questionnaire) which provide detailed perspectives on the issue in different aspects. Literature review also showed that research on this specific issue has generally focused on student teachers and their concerns on it (e.g. Starkey and Rawlins, 2012; Caires and Almeida, 2005). All these research shows that understanding what and when student teachers learn during practicum within the context of initial teacher education could help teacher educators, mentors and programme designers to prepare teachers to meet the needs of twentyfirst century learners as Starkey and Rawlins (2012) stated. Zeichner (1996; cited in Tuli and File, 2009) also states that a practicum is educative if it helps teacher candidates to understand the full scope of a teacher's role, to develop capacity to learn from future experiences and to accomplish the central purpose of teaching.

### **Purpose of the study:**

This study mainly aims to investigate teacher candidates' view points about teaching practicum process. The study also investigates their difficulties, perceptions and expectations from this process?

### **Method:**

In this qualitative research, semi-structured interview method was mainly used in order to understand and elicit the perceptions of preservice teachers about their stories regarding with teaching practicum process. The main of using interview method in this present study was that it might provide a rich data about the issue which has been investigated. Twenty preservice teachers were interviewed in the study and only voluntary participants were included. In the interview process, questions which aim to reveal their view points about teaching practicum process were used. For example, the participants were asked the most useful and the least helpful aspects of teaching practicum. There were also some other questions in the interview process. Once the database don interviews were collected, they were analysed by using content analysis. During the analysis process, two researchers analyzed transcribed interviews. Main themes and categories were emerged from data as a result of content analysis (Glaser & Strauss, 1990; Miles & Huberman, 1994).

### **Findings:**

Data analyses process is in procedure. Data analysis process so far revealed some interesting and unique stories about preservice teachers' perceptions on teaching practicum process. The findings of the study might be considered by teacher education programs as well as by researchers, educators, and teachers. The results of the study are also expected to provide some clues for improving teaching practicum process for preservice teachers.

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# **Turkish Language and Literature Student-Teachers' and School Managers' Views Related to the Professional and Organizational Socialization Processes**

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The implementations that will reveal the quality of training services in general and Turkish training in particular cannot be evaluated abstracting from the socialization processes of teachers. Turkish Language and Literature teachers have responsibility to teach Turkish language providing trainings on literary texts in Turkish literature and language and expression lessons. Professional and organizational socialization of these teachers should be discussed in comprehensive studies; and results of these researches should direct the efficient language teaching implementations. For that reason, in this research, it was aimed to reveal what the implementations are related to vocational and organizational socialization processes of Turkish Language and Literature teachers carrying on their duties in secondary education schools. In accordance with this general aim, the research problem was expressed as below:

- What are the Turkish Language and Literature teachers' and school managers' views related to their professional and organizational socialization?
- Are there any statistically significant differences between the views?

## **Method**

In this section, research model, sample and population, instrument, how the scale was developed, statistical methods and techniques used for data analysis, and the factors related to the interpretation of data were emphasized.

## **Research Model**

In the research, views of Turkish Language and Language teachers and school managers were asked. Related to the vocational and organizational socialization of Turkish language and Literature teachers, the research was a descriptive one on relational survey model quality that aims to reveal the current situation as is. The research was also provided to have a predictive quality with reference to the current situation. The researches designed in comparative model are the ones in which the effect of a measurement related to two or more independent variables upon the dependent variable is researched (Ferguson & Takane, 2005; Yıldırım & Şimşek, 2011). And survey explores provide opportunities to study with large groups including more experimental subjects. Moreover, it can also be provided to reveal the current situation efficiently and objectively through survey studies. In survey models, the researchers do not have any impact upon the independent variables of the research. Such kind of research models can provide opportunity to collect objective data; so that, predictive study

opportunities can be obtained establishing relationships between both the current situation and the future (Balci, 2009; Karasar, 2012).

The population of “Turkish Language and Literature Teachers Socialization Research” included 67 school managers and 92 Turkish Language and Literature teachers carrying on their duties in secondary schools within the borders of Erzincan province Central district. Within the scope of the research, it was aimed to reach all population in terms of both managers and Turkish Language and Literature teachers. During the research process, all managers could be reached; however, 62 ( $62/67= 92.54\%$ ) scales were provided to be sent back. And 85 scales were provided to be sent back from 92 Turkish Language and Literature teachers ( $85/92= 92.39\%$ ) who created the whole population of the research. In the research, the managers who were asked for their opinions included directors and deputy directors.

In the research, the scale used by Burgaz and Özbaş in “Teacher Vocational Socialization Research” (2013) was used for this research, as well, after revision. For that purpose, a pre-implementation was carried out in which 81 managers and Turkish Language and Literature teachers participated. As result of the statistical analysis carried out upon pre-implementation data, the scale was determined to have a multi-factorial structure including 40 items. Total variance explained by the factors was found as 38.644%. The variance explained by the first factor of the scale as “Academic Training Factor of Turkish Language and Literature Teachers” was noticed to be 9.698%; and the variance explained by the second factor of the scale as “In-Service training Factor of Turkish language and Literature Teachers” was 12.697%; and the variance explained by the third factor of the scale as “Organizational Socialization Processes Factor of Turkish Language and Literature Teachers” was determined to be 16.249%. Alpha reliability coefficients were found as .897 for the first factor, .907 for the second factor, and .930 for the third factor. Explained total variance rates and alpha reliability coefficients revealed that this developed scale could be used in this research.

### **Data Analysis and Interpretation**

In the research scale, 40 items prepared through five-point Likert scale were included. For the analysis of descriptive data obtained during the research process, arithmetic average ( $\bar{X}$ ) and standard deviation (sd) were calculated from statistics; paired comparisons were evaluated from t-test results; and the data obtained from independent variables more than two were evaluated with one-way ANOVA. Multiple comparisons were performed in order to find the source of the difference appeared as result of ANOVA statistics. The level of .05 was regarded for the level of significance and comparisons.

### **Findings and Discussion**

According to the research findings, it was understood that Turkish Language and Literature teachers found academic training processes among the implementations including vocational socialization as adequate at medium level ( $\bar{X}=2.84$ ) and, implementations related to in-service training adequate at a low level ( $\bar{X}=2.57$ ). The findings can be interpreted as that Turkish Language and Literature teachers regarded academic training services carried out by universities as inadequate. Turkish Language and Literature teachers perceived organizational socialization processes at a medium ( $\bar{X}=2.83$ ) level like academic training processes. This average indicated a fairly low ratio and revealed that that Turkish Language and Literature teachers perceived organizational socialization implementations as inadequate at total basis as well as the academic training processes. School managers considered academic training

processes including their vocational socialization of Turkish Language and Literature teachers as adequate at a low medium ( $\bar{X}=2.63$ ) level. And the managers regarded the in-service training implementations carried out related to the Turkish Language and Literature teachers at a low ( $\bar{X}=2.53$ ) level as perceived by teachers. These findings indicated that Turkish Language and Literature teachers and managers regarded the in-service training carried out by the Ministry of National Education as unsuccessful. The managers considered organizational socialization implementations more inadequate and less efficient ( $\bar{X}=2.59$ ) rather than the teachers. This finding can be interpreted as that managers regarded the performances of teachers as inadequate in terms of organizational socialization.

### **Conclusion, Discussion and Suggestions**

According to the “Turkish Language and Literature Teachers Socialization Research,” Turkish Language and Literature teachers and managers considered that teaching profession in Turkey had no social status. And both managers and teachers emphasized the inefficiency of in-service training implementations in terms of life-long training.

In accordance with the research results, it was suggested that in order to provide total vocational and organizational socialization of Turkish Language and Literature teachers, national standards related to this branch should be developed.

**Keywords:** Language Teaching, Academic Training, Turkish Language and Literature Department, Vocational Socialization, Organizational Socialization.

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## Social Studies Teacher Candidates' Perception Towards Spee

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The first and most important matter investigated by each teacher candidates studying at education faculties of the universities in Turkey since their first year of license education is as follows: at what level the base point of State Personnel Election Examination related to their own branch and will they get enough point to be appointed? In this sense, today teacher candidates' number waiting to be appointed is in the first row with twenty three thousand. Considering that the unique obstacle of a social studies teacher candidate studying with the ideal of being a teacher is SPEE when he/she completed the 4<sup>th</sup> class, it is thought that both the senior students and their families experiencing this process pass through an anxious process and this situation creates a psychological pressure especially on the students and it causes negative behaviors (Gündoğdu, Çimen and Turan, 2008; Karaca, 2011; Tümkaya, Aybek and Çelik, 2007). In this study aiming to detect in what direction the social studies teacher candidates' perception towards SPEE, general perception of the participants towards the exam preparation process, efficacy perception and anxiety levels, appointment criteria, their thoughts towards field knowledge exam and what their future plans if not reached to enough point for appointment are tried to be detected. This study in which descriptive survey method was used was conducted in accordance with qualitative research methods. The participants within the study group are composed of 765 teacher candidates studying in social studies department of education faculty in five universities. It was made use of "Opinion Survey Towards SPEE" in order to detect the perceptions of the participants towards SPEE. 27 of the 29 items in the measurement instrument used were formed in accordance with five point likert scale, 1 of them was formed in accordance with multiple choice test technique and 1 of them with open ended question type. According to the findings reached in conclusion of data analysis conducted, it was detected that 45% of the participants thought that SPEE is a necessary exam, 70% of them thought that question type in the exam conflict with our education concept, 54% of them did not evaluate SPEE as an objective exam, 42% of them saw SPEE as the most important exam in their life. Again, 38% of teacher candidates stated that they must study for the exam from the third class, 23% of them from the first class, 21% of them from the second class and 7% of them from the fourth class. The rate of the ones saying that they were anxious about being unsuccessful in SPEE was detected as 73%. According to the gender variable, that boys attributed a meaning to SPEE more and they were exposed to be psychological pressure from the family and close relatives much more than girls were detected as well as a significant difference was observed about that girls had higher anxiety level than boys, men opposed to the field knowledge exam more than girl students. According to the variable of university, it was detected that the participants who participated in the study from Gazi University thought that all the candidates had not the equal opportunity towards SPEE and about this matter there was a significant difference among the other participants. That the students from Giresun University gave less importance to SPEE than the other participants, and the participant group having the highest self-confidence at the point of getting enough point from SPEE was from Yüzüncü Yıl University and the lowest self-confidence was seen in the participants participated in the study from Giresun University were detected. Although Yüzüncü Yıl University participants evaluate field knowledge exam as a tool in measuring the professional competency, it was observed that the participants from

Gazi University had a contrary perception. According to the variable of class level, 4<sup>th</sup> class students were observed to have a perception about that SPEE had been commercialized and some groups got unearned income from this situation. It was reached to the conclusion that the anxiety of the participants towards the exam was directly proportional to class levels and the believing in getting the necessary point from SPEE moved along opposite directions. It was detected that getting higher the class level, they had an opinion of being taken of the teachers as much as the need by the Ministry of Education and as a result removing SPEE was a requirement. Among the answers given to the question what the future plans were if they did not reach enough point in SPEE, it was detected that there were some plans such as “*trying to be a policeman, preparation for the exam again, getting married (mostly the answer given by the girls) tending towards the private sector, making academic career*”. In conclusion of the research, it can be said that the researchers have generally a negative perception about SPEE. It was reached to the general results that they were quite pleased with the application of field knowledge exam, they evaluated SPEE as an objective exam, and they had an opinion of being prepared for the exam was required since 2<sup>nd</sup> and 3<sup>rd</sup> class. In the light of the findings reached from the studies, in the calculation of SPEE points of the candidates, there are some suggestions such as considering license point averages, reviewing the student quota accepted to the universities, allocating various job opportunities for the candidates who are unsuccessful in SPEE and being more correlated of the questions used in field knowledge with the topic content of the courses in social sciences license program.

**Keywords:** SPEE, teacher candidates, perception

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# **Predictive Power of Self-Efficacy and Academic Involvement on Academic Satisfaction in Teacher Candidates**

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In general, satisfaction is defined as the emotions resulting from the inner and the external attributions related to one's activities (Ellis, 1984; as cited in., Lathem, 1998). Similarly, teacher candidates' academic satisfaction is affected by the contentment of their university education, the contribution of that education to their professional life and their interactions between the students and the colleagues.

In the literature, academic satisfaction has been studied in relation to many important variables such as self-efficacy, environmental supports, perceived goal progress (Lent et al., 2007), personality characteristics (Logue et al., 2007), academic factors such as the quality of teaching, skills and knowledge acquired, the student's feeling of 'belonging' and perceptions of the institution's responsiveness and concern (Gibson, 2010), value orientations (Keup, 1999), and academic quality (Özgüngör, 2010). All these studies have indicated that academic satisfaction is affected by academic surroundings and plenty of personal factors.

However, there is little research documenting the relationships between the teacher candidates' academic satisfaction, self-efficacy perceptions and academic involvement together. Also there is no research demonstrating the predictive power of self-efficacy and academic involvement on academic satisfaction. Additionally, the need to understand the nature of the relations between various theories and thus to explain the differences in the quality of students' behaviours is obvious. Following this view, the primary goal of the present study was to examine the role of the teacher candidates' self-efficacy perceptions and academic involvement on academic satisfaction.

## **Method**

### ***Research Design***

While conducting the research which aimed to investigate the predictive power of self-efficacy and academic involvement on academic satisfaction in teacher candidates from different majors in elementary education department, the descriptive survey model was used.

### ***Participants***

A total number of 336 third (113) and fourth (223) grade teacher candidates enrolled in the different department of Faculty of Education at Pamukkale University, Denizli, participated to the study. The sample included 90 male and 246 female whose ages ranged from 22 to 35 years old.

### *Data Collection Tools*

1. **Teacher Self-Efficacy Scale:** It is a self-report test including 24 items with three subtests (capability concerning instructional strategies, student engagement, and classroom management) developed by Tschannen-Moran and Hoy (2001) and adapted to Turkish by Çapa, Çakıroğlu and Sarıkaya (2005).
2. **Academic Satisfaction Scale:** It is a self-report test including 5 items and developed by Schmitt et al. (2008). The scale was adapted to Turkish by Balkis (2013).
3. **Academic Involvement Scale:** The scale is a self-report test including 5 items, developed by Huang (2007) and adapted to Turkish by the researchers in this study.

### *Data Analysis Techniques*

The bivariate correlation coefficients and regression analysis were performed to test the hypotheses conducted to answer the questions in the study.

### **Findings, Conclusions and Suggestions**

#### *Correlation Analyses*

Pearson Correlation analyses were performed to analyze the relations among self-efficacy, academic participation and academic satisfaction. Results showed that the sense of efficacy concerning instructional strategies and student engagement was positively related to academic involvement (respectively .21, .22) and academic satisfaction (respectively .24, .24). The results also indicated that the sense of efficacy concerning classroom management was positively related with only academic involvement (.24).

#### *Regression Analyses*

Multiple regression analyses were used to analyze the predictive power of self-efficacy and academic involvement on academic satisfaction, as the academic satisfaction degree was the dependent variable, self-efficacy and academic involvement were independent variables. Regression analyses indicated that the contribution of self-efficacy and academic involvement together to the variance of academic satisfaction is significant ( $R^2$  (.11),  $F = 9,960$ ,  $p < .01$ ). According to these results the best predictors of academic satisfaction were all these subtests of the sense of efficacy and academic involvement.

According to the results obtained in this study, it could be suggested that the colleagues should stimulate teacher candidates to develop their sense of efficacy concerning instructional strategies, student engagement and classroom management skills and increase their academic involvement level.

**Keywords:** Academic satisfaction, self-efficacy, academic involvement, teacher candidates

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## Review on the Professional Values of Teacher Candidates

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People have experienced any problems in reaching information in today's society. Such that, time for getting information is reduced and people are equipped with the mass of information that requested or unrequested. According to Lickona (1996), issues such as disruption of family structure, trends that negatively affect young people's character require a deliberate character education (as cited in Ekşi&Katılmış,2014:83). It is the mutual idea of all thinkers that perform character education based on behavioral or cognitive theory to educate this in schools. The executive of education and training activities is the teacher. It is considered that this researching provides predictable information to decision-makers about which character education approach would choose by a teacher candidate, what values would mainly teach or how role-models would be to students, what need of teacher education would be in the future. In this context, the aim of this research is to analyze teachers' professional values in terms of different variables. When the related literature is examined, it is appeared that most of research which are carried out on teacher candidates interested in relationship between value preference or own personal values and different variables. Therefore, it is considered this research would complete the gaps in literature.

### ***Method:***

The research has been designed as a descriptive survey. The sample were a total of 860 undergraduate students who are enrolled at a state university in departments of Science Teaching –ST- (n=154), Elementary Mathematics Teaching –EMT- (n=155), Preschool Teaching –PT- (n=179), Social Studies Teaching –SST- (n=159), Elementary Teaching –ET- (n=213) selected according to simple random sampling. As a data collection tool in study were presented to students a questionnaire which consist of two parts. In the first part, Professional Values Scale which has 24 items and consists of 4 sub-dimension (being respectful to differences, individual and social responsibility, being against violence, being open to cooperation) developed by Tunca&Sağlam (2013) was used. In the second part of measuring instrument prepared, different questions were asked to students with the intent of acquiring their demographic information. To determine the statistical test methods to use, it was examined whether data have normal distribution. According to distribution, it was decided to use combination of both parametric and non-parametric tests. The relation between demographic variables either points of students' professional values scale or points of 'being respectful to differences' sub-dimension were tested.

### ***Findings:***

The results of test indicate that there is meaningful difference that is disadvantageous to students who are enrolled to departments of numeric weighted courses (ST, EMT) between departments of teacher candidates and professional values' points. The result of test indicate that there is meaningful difference statistically between departments of teacher candidates and the average of points that they obtained from 'being respectful to differences' sub-dimension. The result of test performed to designate significant differences between the groups, and EMT is that meaningful difference that is in favor of departments having verbal weighted courses (PT, ET, SST) was seen. According to these results it can be said that students studying departments having numeric weighted lessons have lower professional values in terms of 'being respectful to differences' sub-dimension than students studying departments having verbal weighted courses. However, it is contrary to expectation finding that there is no significant difference between the averages of students of ST and SST.

According to result of test carried out to determine if there is meaningful difference between attitudes towards parent's profile of teacher candidates and points of 'being respectful to difference' sub-dimension, there is meaningful difference that is in favor of teacher candidates saying that I don't have any problem with students having parents who are crime, different race and skin color, different ethnic, different religion, different sectarian, gipsy, foreign employee and refugee or congenitally disabled. With reference to, we say that teacher candidates having high levels of being respectful to difference are fairer than others and show a tendency to non-discrimination between students. Besides, there is no meaningful difference on account of parent's profile who are extreme lefty, reactionary, immigrant, familiar person or relative, druggy or alcoholic.

### ***Conclusions and Suggestions:***

Teaching is much more laborious and deeper professional. It is expected that teachers should gain necessary ability in order to produce and use information to students and also necessary attitudes and behaviors to be adjustment individual with the community. Besides, teacher must be role-model. Because teachers are more effective than objectives and contents that no matter how well they are chosen on behaviors (Sünbül,2001).

The study emerged from that there is meaningful difference between departments of teacher candidates in favor of having no problem with many of parents. This shows that teacher candidates who have high levels of being respectful to differences haven't distinguished between students in terms of parents.

In general, when obtaining data were evaluated, it was found that there is meaningful difference that is in favor of departments having verbal weighted courses (ET,PT,SST) between departments in terms of both points of students' the professional values and points of 'being respectful to differences' sub-dimension. For the reason of this statement, it can be deduced that this condition arises from to mention of human factor as more and versatile.

According to Aydın (2015:56), when looking at the world applications, ethical behaviors have been gained to teacher candidates in pre-service. Therefore, it is important to uncover the professional values of the teacher candidates in terms of educational intervention. It is recommended that research should be done more comprehensive, moral education should be added to the whole teacher programs in pre-service.

**Keywords:** Moral education, professional values, teacher candidates

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## **A Tale of Teacher Induction: What Might Future Teachers Experience in the Southeastern Anatolia?**

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Understanding beginning teachers' first-year experiences is critical not only for addressing the realities and needs of the teaching societies but also for improving the quality of teacher education and induction programs. As all teachers go through more or less a similar adaptation process, the induction period appears as an important phenomenon that influences future stages of a teacher's career, because it is a stage where new teachers are to confront the complexities of the profession more realistically and take multifaceted responsibilities as an individual for the first time. Therefore, a particular attention is paid to teacher induction issue among other educational research and development initiatives. Building on this scheme, this is an ongoing case study that explores early experiences of a beginning teacher who was assigned to a village close to Syrian border in the southeastern Turkey and portrays his induction process with the purpose of addressing issues and challenges of teacher education for the future.

As qualitative research seeks to propose a naturalistic investigation and complete picture of a phenomenon through subjective data and discovery-oriented approach, this study's focus of attention is not on generalization but on understanding the particulars of the subject under inquiry within his own habitat. This qualitative study has been carried out with a novice teacher in a longitudinal way over the course of his induction year. Induction year is defined, in this study, as a transition year that starts with a teacher's assignment to a workplace by the Ministry of National Education and ends with the official confirmation of that teacher's position as a qualified teacher by the Provincial Directorate of National Education. The study is being carried out in three phases, two of which have already been completed, and the last phase, which is data analysis, will be conducted henceforth.

In the first phase, a research plan was prepared, related literature was reviewed, and the subject was determined and informed about the aim, scope, and necessary procedures of the research. In determining the subject of the current study, purposive and convenient sampling strategies were adopted with the intention of finding a volunteer and easily accessible case who is teaching at a place close to Syrian border of Turkey. Before the second phase, which is data collection, started, an informed consent form stating that participation in the study is on a voluntary basis and personal identification information is kept strictly confidential was provided to the subject of the study.

In the second phase taking about one year to complete, an in-depth data gathering process was executed through multiple ways: (1) periodic interviews, (2) reflective journals, and (3) personal photographs. The first step started with a semi-structured interview conducted soon after the subject was assigned as a teacher to his workplace. The rationale behind this interview was to investigate his feelings about, expectations from, and readiness for the teaching profession. Three more periodic interviews were administered at intervals of 4 months in order to see his progress as a new teacher. Within this time period, the subject was asked to keep a reflective journal on which he would write about his induction process

regarding all aspects of the profession and a personal photograph album which would include pictures taken related to his profession throughout his induction year. The data gathered from these three sources were divided into three periods of 4 months and used to discover rather than verify the subject's initial feelings and understandings about the induction process as well as possible changes in his attitudes and perceptions.

The last phase will be completed in three steps through (a) thematic coding, (b) narrative analysis, and (c) image analysis. First of all, the data obtained from the interviews will be transcribed, coded, categorized, and interpreted qualitatively, and the findings will be organized on the basis of the themes derived from thematic coding. Secondly, the narrative analysis will be performed in order to examine the subject's reflective journals through techniques like structural and thematic analysis which will ensure both categorization of aspects and structures at textual and cultural level. Finally, 400 photographs taken by the subject of the study over a period of one year will be analyzed through three methods of visual analysis: description, reflection, and formal analysis, all of which will serve to look closely at an image, absorb its detail, interpret emotions evoked by the images, and determine strongly represented elements in the photographs.

With the help of this study, the researcher intends to portray how it is like to be a new teacher in the Southeastern Anatolia, produce more in-depth and comprehensive information about teacher induction issues and challenges, and provide implications for the 21<sup>st</sup> century's teacher education programs in Turkey.

**Keywords:** Teacher education, teacher induction, beginning teachers, novice teachers

# English as a Foreign Language Instructors' Cognitions on Language Learning Processes

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The purpose of this study was to investigate language learning cognitions of EFL instructors teaching in higher education institutions. The concept 'language learning cognitions' stands for the unobservable cognitive dimensions of teachers in relation to what they think of, believe in, know about and understand from language learning. As tertiary level EFL teaching is the only setting that provides one to two-year intensive programs and EFL instructors are the principal players in foreign language teaching in Turkey, exploring their cognitions would provide a better understanding of the status of EFL teaching in Turkish context. The significance of this study is rooted in the doctrines of an important field of study, psychology. To illustrate, cognitive psychology deals with how knowledge and beliefs exert a strong influence on human action and draws attention to the influence of thinking on behavior. Therefore, understanding teaching requires understanding teachers' mental lives. In the light of this rationale, the study aimed to answer these two research questions: (1) What are the EFL instructors' language learning cognitions on linguistic aptitude, priorities in language learning, and good language learners? (2) Do those cognitions change by certain variables such as: age, teaching experience, academic background, workplace, and national or international exam scores indicating language proficiency?

Rooted in the aforementioned purposes, this study is both a survey and a correlational research. The participants consisted of 606 EFL instructors teaching in 15 different higher education institutions in Ankara, Turkey. The data were collected through a single, cross-sectional inventory, which was designed by the researchers to gather intended information related to cognitions of the participants. *Likert Scale* was adopted to inquire the cognitions on language learning processes in five-level scale from (1) *Strongly Disagree* to (5) *Strongly Agree*. The data collection instrument was piloted twice, and the reliability of each dimension in the inventory was ensured through *Cronbach's Alpha*. The data were analyzed through descriptive and inferential statistics by using frequency distribution tables, percentages, means, standard deviations, t-tests, ANOVAs, and Pearson correlation coefficients.

The descriptive results indicated that the participants tended to adopt: an *interactionist* perspective emphasizing the significance of the environment around individuals learning a language; a *performance-oriented* approach focusing on real-life functions of language skills and areas; and a slight orientation to *legislative* learners who can create their own rules and decide on their own priorities. The inferential analyses revealed that the participants' cognitions on certain aspects differed in relation to age, teaching experience, and academic background.

The findings obtained from this study offered implications for teachers as well as the other stakeholders in the contexts of both pre-service and in-service years. It is revealed that teaching has a complex feature being both a cognitive as well as a social activity, and it is mostly guided by teachers' personal, practical, and experiential knowledge as well as their beliefs and understandings. This study had an objective to explore teachers' cognitions, and therefore it could be seen as a tool for the teachers to confront their own cognitions and reflect on their cognitive orientations when teaching. It had also a value for raising awareness among the participants of the study.

In the study, it was not intended to criticize or misrepresent the teachers by uncovering their thoughts, beliefs, or knowledge; on the contrary, this study exists to be a valuable opportunity for them to reflect on. Through this reflection, they might replace inefficient or out-dated understandings or perceptions about teaching or reinforce efficient teaching practices and pedagogies that work effectively in the classroom. Employing a reflective teaching approach might result in discovering new ideas as well as reshaping existing beliefs and thinking.

Both conceptual and empirical literature on teaching indicated that teachers' pedagogical beliefs, thinking, and knowledge influence their learners' learning and improvement, and the formation of those cognitions mostly occur during pre-service years. As student teachers' cognitive development should be considered in all planning and guiding phases of pre-service teacher education, the findings of the current study could also be utilized to reshape the current content and structure of teacher education programs.

Pre-service teacher education cannot be considered a single-handed party in preparing teachers for a life-long career and enabling their personal and professional development. In-service years also play significant roles in teachers' development. Based on the findings obtained in this study, in-service teacher trainers could also consider acknowledging the significance of studying teacher cognition, because understanding how teachers' cognitions relate to certain practices might provide them with useful signs about teachers' orientations towards educational issues.

With regard to the methodology adopted in the study, an important and valid step was taken to examine self-reported cognitions of the participants. It is acceptable that eliciting cognitive inclinations of individuals through only a survey is a challenging task. Considering the complexity of studying teacher cognition, a qualitative aspect could be added to the current design as a follow-up study, and therefore an in-depth exploration could be ensured. To portray contextual realities better and more meaningfully, case studies from different teaching contexts could also be employed as a research design in further studies.

**Keywords:** Teacher cognition, foreign language learning, teacher education

# **The Critical Thinking Skills of Pre-Service Teachers in Turkey: A Holistic And Diagnostic Approach**

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Critical thinking is widely cited among the key competencies that students need to develop in addition to the content and methods of their discipline (Pithers, 2000). Thus, the aim and focus of education has shifted from teaching *what* to think (transmission of knowledge) to teaching *how* to think (promotion of thinking skills and strategies). According to Lipman (1991) students need to think for themselves, and not merely learn what other people have taught.

Ennis (1985) defines critical thinking as “reflective and reasonable thinking that is focused on deciding what to believe or do” (p. 45). Despite the lack of a single, commonly agreed upon definition of critical thinking in the related literature, there seems to be consensus worldwide that education, in all disciplines and at all levels, should embrace the mission of providing appropriate learning conditions for students to engage in critical thinking and enhance their critical thinking ability (Pithers, 2000). However, teaching for critical thinking poses many challenges, one of which is related to the role of the teacher within this endeavour.

In teaching for critical thinking, the role of the teacher is crucial. To be able to teach critical thinking effectively, it is agreed by many scholars that teachers need to think critically themselves. Accordingly, modeling critical thinking within the classroom is cited as one of the effective strategies in teaching critical thinking effectively (Halpern, 1988; Kincheloe, 2004).

## **Purpose:**

The purpose of the current study was two-fold. It initially aimed to measure Turkish teacher candidates' critical thinking levels. A subsequent goal was to describe the strengths and weaknesses of the teacher candidates in terms of critical thinking skills and dispositions.

## **Methodology:**

A mixed-method cross-sectional survey design was adopted to collect data by means of a critical thinking test developed by the first author. The final version of the test used in the main administration of the study consisted of 10 scenarios situated within contexts associated with issues relevant to the teaching practice. The contextual foundation of the scenarios were derived from real life experiences or adapted from issues emerging in the media related to educational issues. Each scenario was accompanied with an open-ended question, requiring the respondent to answer the question and provide an explanation to justify their response. The items in the Test was worded in the Turkish language, the mother tongue of the respondents.

Troughout the developmental stages of the Critical Thinking Test (i) a critical thinking framework based on the literature was developed; (ii) the first version of the test was drafted and submitted for expert opinions; (iii) the test was piloted with senior students (n=192) and revised based on major difficulties or shortcomings identified; and (iv) the final version of the test was constructed.

Senior students within teacher education departments in Turkish state universities constitute the population of the study. The sample group was comprised of a total of 1190 senior teacher candidates from 14 different state universities in Turkey. With respect to the sampling procedure, the state universities in Turkey were clustered in accordance with the region in which they were situated. Subsequently, representative universities from the different regions of Turkey were selected by means of convenience sampling.

After the data collection phase, the responses to the test items were scored by two external raters utilizing the five-level holistic scoring rubric, previously devised by the first author, in order to quantify the level of teacher candidates' critical thinking competence. Subsequent to the quantitative analysis mentioned, the content of the responses were analysed by the first researcher for diagnostic purposes, namely to determine and describe the strengths and weaknesses of the participants in terms of critical thinking skills and dispositions.

The content validity of the Critical Thinking Test (CTT) was ensured through its submission for expert opinion. As for reliability, the holistic scoring of the responses to the items in CTT were made by two external raters to avoid biased grading. To ensure inter-rater reliability, the external raters were trained by the researcher prior to the actual evaluation. Each rater then scored the responses independently. The internal reliability of the Critical Thinking Test as measured by Cronbach's alpha proved to be .79.

### **Findings:**

The findings showed that teacher candidates had a 'below-average' level of critical thinking, indicating weaknesses in the majority of the critical thinking skills and dispositions. This may imply that teacher candidates may not be able to solve problems effectively and make correct decisions in their teaching practices. More importantly, teachers with a 'below average' level of critical thinking ability may not be able to teach for critical thinking effectively since an effective critical thinking instruction necessitates the modeling of the critical thinking skills and dispositions by the teacher (Halpern, 1988; Kincheloe, 2004).

### **Conclusions and suggestions:**

Based on the findings of the study, it can be concluded that teacher training programs in Turkey need to take some action to address the pre-service teachers' needs in terms of critical thinking.

**Keywords:** critical thinking, pre-service teachers, pre-service teachers' critical thinking levels

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# The Effect of Gender on The Preservice Teachers' Attitudes Towards Teaching as a Profession: A Meta-Analysis

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The main aim of this research is to determine the effects of the preservice teachers' attitudes towards teaching as a profession according to gender. Various scales and different independent variables (gender, major, marital status, level of education, faculty, seniority, etc.) are used in the research studies on the preservice teachers' attitudes towards teaching as a profession using qualitative and quantitative methods (Durmuşoğlu, Yanık & Akkoyunlu, 2009; Özben, 2010; Şahin Taşkın & Hacıömeroğlu, 2010; Tekerek & Polat, 2011; Kesen, Polat, 2014). The results of these studies have showed that there are statistically both significant and insignificant data and some of the results have showed differences in terms of the sub-groups of independent variables. Meta - analysis studies are needed in order to synthesize the results of all these studies and in order to direct new studies in accordance with the preservice teachers' attitudes towards teaching as a profession.

## Method

The goal of the meta-analysis is to combine the findings from the studies in different settings and times at the same subject to reveal the facts and to reach the truest data quantitatively by raising the number of samples (Aytaç, 2014; Cumming, 2012: 205; Dinçer, 2014). Comprehensive Meta Analysis (ver. 2.2.064) was used in this study to determine the variances and to compare the groups in each research. The studies in the research were chosen according to the criteria in the following:

- (i) Criterion 1: Published or unpublished studies: MA thesis and doctoral dissertations and articles were used.
- (ii) Criterion 2: The research methods in the studies must be suitable: it is important that the studies be empirical and male - female groups be used as independent variables in the Meta - analysis research to reach the effects.
- (iii) Criterion 3: The studies must include sufficient quantitative data: the size of samples, average, standard deviation, F value, t value,  $X^2$  value, Kruskal Wallis value, Mann Whitney

U data and p value are very important for male - female teacher groups in order to calculate the effects necessary for meta-analysis studies.

According to these criteria, thirty five studies on the preservice teachers' attitudes towards teaching as a profession. The total number of samples in the study consisted of 10371 participants (4298 females and 6073 males). Females were taken as experimental group and males were taken as control group in the study. In addition, as the moderator that couldn't be integrated into evaluation in the primary studies, the variables including type of publication, the year of publication, the area where the research has been realised, preparing a scale, education level, the major of preservice teachers and the gender of researcher were analysed.

## **Findings**

According to the research, the difference among the standardized averages according to gender has ranged from a value of -0,347 in favour of male teachers to a value of 0,486 in favour of female teachers. It was found out that there were statistically significant differences ( $p < 0,05$ ) in twenty two studies. A low effect statistically in significant level was determined according to the model of fixed effects ( $d = 0,247$ ) and random effects ( $d = 0,271$ ) in favour of female teachers. As a result of the moderator analysis, a moderator effect of the setting where a study done ( $p = 0,162$ ), type of publication ( $p = 0,265$ ), gender of researcher ( $p = 0,196$ ), the major of preservice teachers ( $p = 0,282$ ), the education level/class ( $p = 0,547$ ) and type of preparation of the scales (prepared or improved) ( $p = 0,749$ ) couldn't be determined.

## **Conclusions and Suggestions**

It was found out that there was a statistically significant effect (0,247) in favour of female preservice teachers as a result of combining process in the fixed effects model. It was found out that there was a statistically significant effect (0,271) in favour of female preservice teachers as a result of combining process in the random effects model. These results are in low levels compared to the classifications of Cohen (1988), Thalheimer and Cook (2002). According to this meta-analysis, it can be said that the female preservice teachers' attitudes towards teaching as a profession are a little more positive than the male preservice teachers' attitudes towards teaching as a profession. It can be suggested that the reasons why there is a very low difference in terms of the variable of gender about the preservice teachers' attitudes towards teaching as a profession and why the females have a little more positive attitudes than the males be determined and discussed.

**Keywords:** Preservice teachers, teaching as a profession, attitudes, meta-analysis.

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# **Effect of Problem Posing Applications in Teaching Science on Teacher Candidates' Problem Posing Skills and Their Metacognitive Awareness**

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In recent years, in all the curriculums of science, physics, chemistry, and mathematics courses, the importance of improving students' problem-solving skills, so that they will have the necessary skills to solve problems faced in daily life and overcome challenges, is emphasized (MEB, 2013). Mathematical problem solving includes situations ranging from routine mathematical problems to problems about unknown topics and open-ended research related to mathematical and thinking problems (Akay, 2006). Problem solving is considered as scientific method, critical and creative thinking, and the scientific process skills that will be gained through numerical (routine) and daily (non-routine) problems in the field of science, chemistry and physics as well. It is defined as students' skills to solve problems of daily life and as the ability to produce new knowledge. With this approach, it can be said that the noble goal of problem solving is to contribute to the cognitive development of students not to solve questions which have certain solutions. In this case, students should be aware of everything done at each stage of the learning process. In only such an environment students can be understood and, in this situation, we can expect them to accept and comprehend the new information they achieve. The science teaching approach accepting this purpose is considered as "problem posing". The importance of the problem posing approach is encouraging students to improve their existing conceptual understanding via their own experiences and beliefs. For this reason, according to some metacognitive perspectives, in teaching, more emphasis should be given to problem posing rather than problem solving.

Metacognition is defined as individuals' awareness about their own learning and being able to give feedback on their learning processes. Shortly it can be determined as a way of learning to learn and it contains two types of skills including self-evaluation and self-management (Çakıroğlu, 2007). Consideration of students being able to assess their knowledge and abilities and being aware of themselves and their learning processes makes the problem posing approach even more important in teaching various subjects. For this purpose, learning environments should be arranged so that students would not solve problems with memorized formulas and already known answers. Instead, students should be able to reflect and develop their existing knowledge and should have an opportunity to produce their own problems. Students can be encouraged for problem posing by asking them to create new problems via changing the conditions of the already given problems or formulating new problems based on given situations.

When all this information is evaluated, it is seen that in science teaching students are expected to actively participate in the learning process, to question, explore, and discover what they are learning. In this way, the aim is to prove students' cognitive development, to develop their critical and creative thinking skills, and to train them as individuals who can solve problems of the daily life.

When the problem posing approach is investigated it was seen that it was only used in teaching mathematics. However, studies showed that in this approach students become: active

learners, able to produce new problems by using their already existing knowledge, aware of their own learning, and better problem solvers. In this case if the problem posing approach is used in teaching science courses, individuals can be trained in line with the goals of the science curriculum. Thus, students would be able to assess their knowledge and develop their metacognitive awareness. However, due to the problem posing approach is not in use like other methods in science education it is unknown by teachers. Thus, teachers are not likely using this approach when teaching their curriculum. Students should go beyond the “only solving problems” stage and should be given opportunities to be trained in an environment in which they can solve creative problems and pose their own problems (Akay, 2006). So teachers can have chances to recognize the problem posing approach. Also by being familiar with this approach enables teachers to establish and obtain practical skills that they can reflect into their professional lives.

For this purpose, in this study, elementary school teacher candidates will be trained using the problem posing approach while learning the topic of intensity in science curriculum. Students will have opportunities to pose problems according to different strategies.

## **Method**

The total of 27 teacher candidates will take place in this five weeks long study. These teacher candidates will have training one hour a week. Their performances on problem posing will be assessed based on the rubric developed by Ergün, Gürel and Çorlu (2011). In order to determine the effects of using this approach on teacher candidates’ metacognitive awareness pre-post-test design will be used. The test was developed by Yıldız, Akpınar, Tatar and Ergin (2009) and the results of this test will be assessed by t-test.

## **Findings and Conclusions**

Since this is an ongoing study the findings of the study are not obtained. Findings, discussion and recommendations will be completed by the conference date. Because this study is the first one investigating the effects of the problem posing approach in teaching science, the obtained findings can provide recommendations for future studies and science teachers.

**Keywords:** Problem posing, science teaching, metacognition

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# Examination of the Effects of Field Education on the Learning Styles of Prospective Teachers of Social Sciences

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In higher education, students generally choose to study in academic disciplines that reflect their own skills and interests. Education in an academic field is a process of choice and socializing that has continuity. The learning environments of these chosen academic disciplines shape the learning styles of students (Kolb, 1984). During their undergraduate studies, students are encouraged to think like a mathematician, to feel like a poet and to make decisions like an executive. However, the results of previous studies which have used Kolb's Learning Styles Inventory as an assessment instrument show that there are differences in the dominant learning styles of individuals based on their educational field and occupation (Kolb & Kolb 2005; Mainemelis, Boyatzis & Kolb 2002). According to the results of these studies, the students who study in fields of social sciences such as literature, political sciences and psychology have diverging learning styles while those who study in abstract and applied fields such as physics, natural sciences and engineering have assimilating learning styles. The students who have a tendency for the fields of economy, mathematics and chemistry have converging learning styles while those in the fields of trade and management and education have accommodating learning styles (Bradbaer, 1999; Kolb, Boyatzis & Mainemelis, 1999).

Based on this approach, the purpose of this study is to examine whether a four-year-long teaching field education causes differences in the learning styles of prospective teachers of social sciences. In a previous study by researchers (Özdemir & Kesten, 2012), it was found that a great majority of the prospective teachers of social sciences had converging (38%) and assimilating (38%) learning styles and while the learning styles of prospective teachers differed in terms of the variables of age and year of study, no obvious difference was found in terms of gender. In the aforementioned study, the purpose was to research whether the students' four-year-long undergraduate education caused changes in their learning styles.

Answers were sought for the following sub problems within this framework: 1- What are the dominant learning styles of prospective teachers of social sciences? 2- Is there a significant difference between the learning styles of the prospective teachers in their first year of study and their fourth year of study? 3- Is there a significant difference between the learning styles of the prospective teachers in their first year of study and their fourth year of study in terms of gender variable? The study was conducted by using a pre-test post-test model with one group. The sample of the study consisted of prospective teachers studying at 19 Mayıs University Faculty of Education, Department of Social Sciences Teaching between the years 2009-2013.

A personal information form was used to find the demographic (gender, age and year of study) features of the prospective teachers who participated in the study while the third version of Kolb Learning Styles Inventory (KLSI-3) developed by Kolb was used to find out the dominant learning styles. The prospective teachers who participated in the study answered this assessment tool once in the fall semester of the Academic Year 2009-2010 while they were studying their first year and again in the spring semester of the Academic Year 2012-2013 while they were studying their fourth year. However, while there were 92 prospective teachers who participated in the first inventory the first year, 68 prospective teachers volunteered to participate in the second inventory. Thus, the sample of the current study consists of 68 prospective teachers of social sciences who participated in both data collections.

In order to decide which test method to use in the analysis of the data, the data was checked for normal distribution and homogeneity. As a result of these analyses, it was found that the data was not normally distributed. For this reason, for the analysis of the data, as well as descriptive statistics, non parametric test Wilcoxon signed rank test was used for the analysis of measurements that were repeated for the same group in two different times and Mann-Whitney U test was used to find out whether learning styles differed in terms of gender. Kolb classified the students according to 4 different learning styles and while making this classification, he used the students' dimensions of perceiving and processing the knowledge. Within this context, when the findings of both studies were compared, no statistically significant difference was found between the dominant learning styles of prospective teachers of social sciences in their first year and in their fourth year. On the other hand, when the ways of learning, which were named as concrete experimentation, abstract conceptualization, reflective observation and active experimentation, were considered an exact opposite situation arises. When the variable of gender was considered, it was found that there was no significant difference between the learning styles of prospective teachers both in their first year and in their fourth year in terms of gender. When the findings of this study were assessed in general, it can be said that although the education that the prospective teachers of social sciences received did not change their dominant learning styles exactly, it changed their ways of learning significantly. However, in order to decide whether the education of teaching has an influence on the learning styles or learning ways of students, the results should be supported with the findings of similar studies in different universities or departments.

**Keywords:** Kolb's Learning Styles, Social Studies Candidate Teachers, Teaching Field Education

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# **Job-Embedded Professional Development and Student Achievement: A Meta-Analysis**

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The quality of teaching in schools is generally linked to improving the quality of teachers (Hanushek, & Rivkin, 2006). There is a growing emphasis on teachers' professional development to improve the quality of education in schools (Guskey, 2003). One way to enhance the teacher standards is conducting job-embedded professional development (JEPD) programs in schools (Croft, Coggshall, Dolan & Powers, 2010). Unlike traditional professional development (PD), job-embedded professional development is mainly school or classroom based and is incorporated into the workday, allowing teachers to address immediate problems of practice within their daily work environment (Cavazos, 2013). The purpose of this study was to systematically analyze the research exploring the strength of the relationship between JEPD of teachers and student outcomes. This study possesses the following research question: What is the strength of the relationship between job-embedded PD of teachers and student achievement?

In this study, to synthesize the empirical evidences on JEPD, more than 725 studies were examined. The meta-analysis started by conducting an intensive electronic search using the ERIC, EBSCO, JSTOR, SPRINGERLINK and Google Scholar databases. Search words used included job-embedded professional development, lesson study, coaching, mentoring, case discussion, critical friends groups, portfolio, learning community, study groups, peer observation, action research, supervision, discourse community.

A three-step screening stage was performed to determine the eligible studies. In the first step, the researchers reviewed the studies on three criteria: quantitative research papers, focus on a job-embedded professional development program, released between 2000 and 2014. Studies that did not meet one or more of these criteria were excluded from the meta-analysis. As a result of database search, 725 documents were identified, and as a quick scan of abstracts 557 of them were rejected. Thus, only 168 unique studies met all three criteria in the prescreening step and were sent to the next stage of meta-analysis.

In the second step, the researchers independently read "introduction," "method" and "results" sections of the studies (when needed full texts were read). The researchers rated each study on three more criteria: focus on K–12 teachers, pre-posttest design with control group and report on student outcomes. Of the 168 studies, only 42 studies met criteria standards and were submitted to the final round of screening. The degree of agreement rate between the researchers in sending studies to final stage (the inter-rater reliability) was 96 percent. The two criteria for the final stage were if the document includes sufficient data to calculate an effect size or reports an effect size and if the intervention conducted is job-embedded. At this

stage, only 14 studies met the above criteria and the rest of the coding form was filled for these studies.

The formats of the 14 studies on JEPD was as follows: eight coaching, two lesson study, one mentoring, one learning community, one teacher study group, and one was idiosyncratic program. Two studies were conducted in Australia, two in Canada, one in Thailand, and rest of them (9) were from USA. Ten studies were published in journals as articles, three were dissertations and one was a report. Of the 14 studies, four were randomized controlled trials and ten were quasi-experimental designs. Seven studies focused on elementary, three on secondary, two on secondary and high, and two on secondary and elementary school students. All 14 studies included in the meta-analysis were published between 2003 and 2014, and all included student achievement outcomes. 55 effect sizes (differing between one and 18) and improvement indices were computed across the 14 studies. Of the 14 effects five were small, five were medium, three were high and one was large according to Cohen's (1988) classification. The studies included 552 teacher and approximately 10542 student participants. Five studies reported on reading job-embedded professional development and student outcome effects, four math, one reading and math, one reading and English/language arts, one geometry, one physics, and one literacy.

In this meta-analysis, a composite effect size was computed for each study and the unit of analysis is the study rather than the subgroups. The average effect size values for the effect of the job-embedded PD programs in fixed effects model and random effects models were 0.166 and 0.376 respectively. The Q test results were non-significant,  $Q(13) = 184,66$  and  $\chi^2=22,362$ , rejecting the null hypothesis of a common effect size across studies. The results of the meta-analysis, according to random effect model, showed that JEPD has a moderate effect on academic performance of students (Hedge's  $g = 0,376$ ). The weighted mean effect according to the random-effects model pointed out that the mean effect diverged from zero ( $z = 4,39$ ,  $p = .000$ ) with a 95% confidence interval from 0,208 to 0,544.

Moreover, the spreading of the effects was illustrated by the funnel plot which provided a technique to estimate the existence of publication bias. There was some asymmetry, namely fewer points appearing in the negative range, suggesting possible bias.

All in all, the analysis of 14 studies representing 10542 student participants revealed a significant moderate effect size of Hedges'  $g = 0,376$  between JEPD programs and students' achievement outcomes. The overall effect size found in the present meta-analysis for the effectiveness of job-embedded PD has more practical value than the individual effect sizes stated in 14 studies. Finally the rarity of the number of the studies included in the meta-analysis, which reduces the reliability of generalizing the results, is the most important limitation of this meta-analysis study.

**Keywords:** Job-embedded professional development, student achievement, meta-analysis

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# **Journey from “like” to “upload”: Increasing disability awareness through Social Media**

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Individuals with disabilities (IwD) tend to experience greater social, political and economical exclusion along with the differences in the quality of life than their counterparts without disabilities worldwide. In order to be fully included in life, people with disabilities should access information, the environment and all social systems along with receiving inclusive education and leading an independent living.

Unity in education can only be achieved on condition that there is interaction between student-student and teacher-student. And when it comes to the Physical Education (PE) lessons because of the increasing number of students in classes, it is difficult to provide unity.

As most physical education teachers receive abstract knowledge regarding teaching IwD and have a low level of disability awareness during their undergraduate programs (Block, 2003), they feel themselves not prepared to teach the IwD. PETE students with increased level of awareness would empathize with and have positive attitudes towards IwD when they enter the profession. In order to have the PETE students' disability awareness levels increased, they should interact with IwD and have a deeper understanding of disability. And one of the ways to realize these is the social media. Social media provides people and communities with direct access and interaction, boost teamwork and allows for a immediate share to share and exchange knowledge to underpin the educational settings.

The opinion of “community” and the relationship of community members also plays an crucial role in social networking dynamics. Situated learning theory suggests that learning is happens through relationships among the community members or within a “community of practice (CoP)”(Lave & Wenger, 1991). In our study, group members jointly shared and developed practices, learned from their interactions with group members, and gained opportunities to develop personally, intellectually through Facebook closed-group page which acts as a “community of practice”.

Yet, while the number of studies on raising the awareness of students through knowledge sharing on social media networks has increased(Reid, 2011), there is little known how social media can be used as an educative tool to increase disability awareness of PETE students. The purpose of this study is to explore how social media acts as a communicative space to increase disability awareness of PETE students.

## **Method**

The study was designed as a qualitative research and a longitudinal study covering 2 years involving 33 PETE students and two researchers (first author is the lecturer and the other is

the assistant lecturer). Students received theoretical knowledge (learn about the characteristics of IwD students) through Special Education course for 14 weeks in the first year. Meanwhile, a Facebook closed-group page was opened with the start of the course. Although the course finished after 14 weeks, the students continued to share their posts for one and a half years. These students received “Adapted Physical Education” course for 14 weeks in the first semester of the following year. In our study, Facebook group emerged as a “CoP” (Lave & Wenger, 1991).

Deductive content analysis (Patton, 2002) was used to analyze data. The themes emerged after the data analysis were “like and share: awareness through exposure”, “comment: awareness through experience”, “upload: awareness through ownership”.

### **Findings**

In this study, we examined the effect of social media helping PETE students reaching the exposure, experience and ownership levels of disability awareness (Wilson & Liebermann, 2000) respectively.

We suggest that the Facebook group is an emerging CoP on the ground that the signs of three dimensions that CoP's should have were observed. For example, each student contribute to raise mutual engagement by following and sharing posts on disability awareness. They entered into a joint enterprise both to prepare themselves to teach the IwD and to form a supportive dialogue through face-to-face lessons and Facebook page. Eventually students maintained continuity on actions, routines and practices on disability awareness and therefore developed shared a repertoire.

*“like and share: awareness through exposure”*: When Facebook page was started to support face-to-face lessons, students initially “shared” posts on disability. So, they were either exposed to individuals with disabilities through various methods like videos, newspaper articles or they only “liked” those on disability which helped them understand the IwD, criticize situations from a different perspective and understand their own feelings on disability.

*“Comment: awareness through experience”*: At this level, students are given the opportunity to actually experience disability for a short time to ask questions, express concerns and become aware of the daily obstacles that IwD face. In our study, a goalball activity was conducted in a school with the students without disabilities to have them experience what the IwD actually live through.

*“Upload”*: *awareness through ownership*: This is the ultimate level that students with the highest awareness and responsibility can reach to ensure that IwD being treated fairly and socially included and become advocates for IwD. Our findings showed that upon reaching that level, students start to warn individuals without disabilities not to violate the rights of the IwD's such as violation of guidance paths, and they started to organize events for the disabled.

### **Conclusion and Suggestions**

The PETE students need experiences that inform (exposure), simulate (experience) and empower (ownership) them to empathize with a disability. We presented the effect of social media on the process which enabled students practice a theoretical academic knowledge in daily life. In conclusion, This kind of social media support can be a new method to increase PETE students' disability awareness.

**Keywords:** Adapted physical education, social media, physical education teacher education programs

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## **Evaluation of the in-Service Training Program Targeted to Measurement and Evaluation**

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In the education programs developed in 2005 and revised in 2013, meanings and functions loaded on the components of the programs changed depending on the underlying educational philosophies and learning approaches. It was stated that process-based evaluation lays the foundation for the measurement and evaluation dimension of the programs. With these programs, evaluation of students generally through multiple-choice tests was replaced by evaluation by means of student observations, performance tasks, portfolios, peer-evaluation and self-evaluation and in this way; evaluation is being conducted simultaneously with instruction. In addition to this, as a reflection of international tests, national centralized exams made under the control of the Ministry of National Education were questioned and expectations for more quality evaluation were raised.

In this respect, the transition experienced in the programs and national exams increased the importance of teachers' qualifications in the field of measurement and evaluation; assigned different roles to teachers and gave rise to the question of how qualified teachers are in terms of information and skills required for the fulfillment of these new roles. In the literature, there is a great amount of research focusing on the new programs within the framework of this question. The findings of this research show that teachers experience great difficulties in the implementation of assessment and evaluation processes of the programs. Some of the shared findings of this research are teachers' lack of information and skills required to get to know students, to prepare and implement measurement and evaluation methods and to draw on the outcomes revealed by these methods. Thus, the Ministry of National Education organized many in-service training programs about measurement and evaluation for teachers. For these in-service training programs to be functional and effective, they need to be continuously evaluated and improved. In this regard, the present study aims to evaluate the efficiency of an in-service training program about measurement and evaluation by using "participant-oriented program evaluation approach". The study is believed to contribute to the determination of shortcomings and deficiencies of in-service training programs and in this way, to the continuation of program development circle.

The study is a descriptive study based on qualitative data. The participants of the study are 50 Turkish, Mathematics, Science and Technology, Turkish Republic Revolution History and Kemalism, Religious Culture and Moral Knowledge and Foreign Language teachers from İzmit, Çayırova and Körfez provinces of the city of Kocaeli. The data were collected through

an open-ended interview questions. The data collection instrument includes questions allowing teachers to express their opinions about learning-teaching process and measurement and evaluation process” and to make suggestions for future in-service training programs. The collected data were analyzed through content analysis method in NVivo 8.0 program package. During the evaluation process, the teachers’ responses to each question were coded. The constructed codes were reread to determine the similarities and differences, the codes related to each other were brought together, what each section consisting of codes conceptually meant was tried to be determined and then thematized. The themes were supported with excerpts from the teachers. In order to establish the reliability of the study, first the analyses were conducted by one of the researchers, then the themes, sub-themes and codes constructed by two researchers in relation to each question were examined together with their excerpts. At the end of the process, the three researchers came together and determined the controversial codes and themes and consensus was reached on them. By using the reliability formula proposed by Miles and Huberman (1994), convergent percentage regarded to be the reliability of the study was calculated to be 87. This value shows that the study is reliable (Miles and Huberman, 1994).

The participants of the study are very positive about the benefits of in-service training they received. It helps participants to develop certain knowledge and skills they needed such as:

- How to write multiple choice tests
- How to calculate scores in the “Transition from the Basic Education to the Secondary Education” – A national exam
- Key points to be considered when writing good exam questions and giving assignments
- How to use assessments in the classroom
- New trends and approaches in the measurement and evaluation
- How to deal with student behavior

It is also stated that instructor behaviors in the teaching and learning process have a potent effect on participants to enhance positive attitudes towards course. Specifically, these behaviors include such things as effective use of technology, body language, voice, methods and techniques, being an expert on a particular subject and giving good examples in the classroom. On the other hand, it was recommended that teachers and experts can contribute to the development of in-service teaching programs. Furthermore, managers from Ministry of National Education should be called in-service training meetings about measurement and evaluation to be held on future. The reason for their participation is to address teacher issues. In light of the findings of the study, some suggestions will be made.

**Keywords:** Measurement-evaluation, in-service training program, program evaluation, participant-oriented program evaluation approach

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# **The Investigation on Teacher Candidates' Perceptions about Physical Dimension of Classroom Management**

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The physical organization of a classroom may affect main components of school education in a positive or negative manner. The educational approach followed is in related to classroom seating chart, the number of students, heating, materials, lighting, and physical appearance etc. In the related literature, it has been seen that some studies about the physical dimension and organization of the classroom (Karaçalı, 2006), about the seating chart and the role of a teacher (Ersoy, 2005), about the physical characteristics of the classroom and its effect on the learning process (Şahin Sak, Sak & Tuncer, 2013) and about the physical atmosphere of the classroom in terms of affective domain development (Tuncel, 2008) have been available. No previous studies; however, about the teachers' point of views have been seen. This research aims at finding out how teacher candidates perceive the classrooms that they observe regarding physical dimension. By doing so, this study intends that teacher candidates gain a perspective to manage their classrooms in their actual teaching careers. In addition, it has been thought that other education-related parties such as policy makers, teachers and parents consider physical characteristics of classrooms. In conclusion; it has been proposed that the results of this study will address teachers candidates, teachers and related policy makers.

This research aims at investigating teacher candidates' perceptions about the physical dimension of classroom management. In line with this general objective, the research questions below are formulated.

1. How have teacher candidates perceived the classroom that they observed regarding its physical properties?
2. What are the characteristics of the classroom that teacher candidates dream about?
3. Are there similarities and differences between their actual classroom they observed and their dream classroom?

## **Method**

3rd year students at the Primary School Education Department of a state university were instructed to visit a primary school and to observe a classroom in terms of its physical dimension of their Classroom Management course. The instruction given before their observation was as follows: "Observe a primary school classroom, focusing on its physical characteristics, and prepare a report about your point of view by means of writing and drawing. Then, prepare a report about your dream classroom in terms of its physical characteristics by means of writing and drawing." Through this instruction, the students were guided both to tell about the actual classroom they observed and to tell about their dream classroom. The students were guided to work individually. Next, these reports were evaluated

by the researchers. Considering the physical variables within the framework of physical dimension of classroom management, the researchers analysed 102 reports.

In this study, descriptive analysis was followed. The reports based on the teacher candidates' observations and point of views were coded and the data were transferred into tables in line with the pre-determined categories. These categories and codes are as in the following:

The category of points to consider during physical organization of classroom (room, sight / visibility, materials / accessibility to materials)

The category of physical variables (number of students, light, heat, colour, noise, size, cleanliness, bookshelves, physical appearance)

The category of classroom seating chart (organization of desks, students' seating plan)

Each teacher candidate's observation and opinion report was analysed and coded in line with the pre-determined categories. During this process, some other points that were not presupposed by the researchers but offered by the participants such as Atatürk corner, boards and various corners were grouped under "others".

### **Findings, Result and Suggestions**

According to the teacher candidates' observations in the classrooms, in general the desks were traditionally organized. How the students were seated was considered only in terms of number and gender by the teacher candidates. For example; "*students of the same gender were seated in pairs*" etc.

The least mentioned physical variables considered by the teacher candidates were heat, colour and size. Other physical variables such as number of students, cleanliness and bookshelves were emphasized both in the actual classroom observed and in the dream classroom.

Other factors reported by the teacher candidates during their observation were room, absence/presence of materials, boards and the Atatürk corner. It was seen that the teacher candidates improved the conditions of classroom that they actually observed while talking about their dream classroom (ex: if there had been no media materials in the actual classroom, they mentioned the presence of these materials.) The student teachers' imaginations were; to some extent, limited. Only a very limited number of participants considered their dream classroom, which did not derive from the actual classroom they observed.

In conclusion, it was seen that the teacher candidates gave importance to some factors such as room and classroom materials in terms of physical dimension of classrooms but they mentioned very limited number of them. What was surprising was that all participants raised attention on the Atatürk corner and multifunctional boards in classrooms. Nearly all teacher candidates reported about seating plan and said that it was a traditional seating plan. In their dream classroom, they also preferred a traditional seating plan. In line with these results, it can be concluded that the teacher candidates are not fully equipped with knowledge about the physical dimension of classroom organization. Further studies should address the reasons of this lack of knowledge.

**Keywords:** physical dimension, teacher candidate, classroom management

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## Teacher Education Students' Academic Misconduct Behaviors

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Evaluation is one of the process of education and training required while using a variety of assessment tools that provide to see whether target has been achieved. Being objective is very important in this process. For the sake of being objective lots of measure are taken but sometimes we can't keep things moving and there may be some variety problems in evaluation. These problems come out of not only the objectiveness of person who evaluate the works but also there may be sometimes problems that effect the objectiveness of evaluation results from the ones being assessed. These are some negative behaviors in the preparation of homework, examination process and after examination such as cheating, plagiarism, try to impress the assessor with the present and other similar things, striving to achieve the pre-exam test questions, provides to get someone else enter the exam, etc. These can be broadly grouped under the title of academic misconduct behaviors. In the literature, these academic behaviors were not much addressed fully in the investigations. Especially cheating and plagiarism, are the subject of much investigation and research. Even in some articles (Rennie and Crosby, 2001) honesty and integrity were discussed related with these negative academic behaviours. Seen from this aspect, these negative attitudes and willingness to these behaviours even take no notice of these is really serious problem. Especially for the teacher candidates. As we all know that teachers teach us the right things, behave in correct ways and be true examples. Students sometimes or many times applied these negative behaviours despite knowing that such behaviour is ethically or morally wrong.

To sum up academic misconduct behaviors are neither ethic and moral nor fair for the objective evaluation. On the other hand knowing which behaviors that students try more may give important datas for assessors and may make them a bit more alert. Also this can enlighten the related measures that will be taken.

The purpose of this study is to adapt into Turkish and investigate academic misconduct behaviors among teacher education students based on some variables in Turkey. The study aims at describing the situation and used a survey. The sample included teacher education students from seven different universities (Osmangazi, Dumlupınar, Mehmet Akif Ersoy, Ankara, Fırat, Onsekiz Mart and Gazi). The majority of the participants were (% 67, 395 students) were female while % 33 (196 students) were male. The survey used in the study

was developed by Ferrel and Daniel's (1995) academic misconduct survey. Crocker and Algina' (1986) suggestions were followed. The adaptation into Turkish was carried out by the researchers. The alpha reliability for the whole scale was 0.81. to determine bilingual validity scale was carried out with the department of english language teaching. And bilingual validity was 0.43. For structure validity of scale was carried out confirmatory factor analysis. This finding indicated that scale was reliable and validity for Turkish language (RMSEA 0.094, NFI 0.71,  $\chi^2$ /sd 6.2, GFI 0.75, AGFI 0.71). The findings indicated that there was differences among the sub-dimensions of the Academic Misconduct Survey based on gender. The first dimension was cheating on homework and male students were more likely to exhibit misconduct behaviors more than the female students. When academic achievement was taken into account, academic misconduct behaviors were more likely to be seen in the cheating on homework sub-dimension for students who had a Grade Point of Average (GPA) of lower than 2.00. Academic was not a significant factor on the other sub-dimensions. Differences were also found in exams or homeworks when compared to class levels. Thus, when the mean ranks were taken into account, freshman students were more likely to use cheating in their homeworks or exams than the other class levels (sophomores, juniors and seniors). The other subdimension, subtle manipulation differed student class levels. When mean ranks taken into account, the highest mean ranking were the sophomores. In terms of the final sub-dimension which was bold manipulation, juniors' mean ranking was the highest. Overall, it may be concluded that in general males were more likely to demonstrate academic misconduct behaviors than females. Also, when academic achievement was considered, low achieving students were more likely to show academic misconduct behaviors. Finally, seniors were less likely to show academic misconduct behaviors in all dimensions than the other class levels.

**Keywords:** academic misconduct, cheating, cheating on homework, academic plagiarism.

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# **The Evaluation of Prospective Teachers' Perceptions Regarding the Concepts of Ideal School, Ideal Teacher, and Ideal Student in the Context of Teacher Training**

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Teacher training is accepted as an important process which affects all systems of societies. As a result of the process, in the short term, educational institutions concerns acquiring qualified teachers in the system and in the long term all institutions of countries closely concerns that through students who are trained by these teachers. Accordingly, it is important to analyze and evaluate today's teacher training policies by all education sharers on account of being developed and educated more qualified teachers.

On the other hand, although quantitative researches are frequently conducted about prospective teachers on several dimensions, there is importantly need for qualitative researches. (Başkonuş, Akdal & Taşdemir, 2011). Besides that, metaphors are enable to see a fact through the eyes of someone else and to comprehend and configure field of a concept within the framework of another concept. These are also strong mental mapping and modeling mechanism aimed at comprehending and configuring the world of individuals (Arslan & Bayrakçı, 2006). Commentaries of future teachers on how these concepts that are closely associated with their fields should be may serve as a guide especially for future teacher education policies. Therefore, this study is an attempt to be exposed the perceptions of prospective teachers as future educators about the concepts of ideal school, ideal teacher, and ideal student and to be evaluated these perceptions in the context of teacher training as well as to make education sharers to have a voice of on future education policies.

**Purpose of Research:** In this research, it is aimed to determine the perceptions of first year and forth year prospective teachers who study at education faculty about the concepts of ideal school, ideal teacher, and ideal student as well as to evaluate the result in the context of teacher training. This general purpose will be matched answers to the following questions:

1. How are the perceptions that prospective teachers have about ideal school, ideal student, and ideal teacher?
2. What are the similarities and differences of the perceptions of prospective teachers about the concepts of ideal school, ideal teacher, and ideal student?

## **Method**

**Research Pattern:** In this study, it is adopted qualitative research approach which focuses on reality which is socially conducted, the close and intimate relationship between researcher and topic or group worked on, and how concepts and social experiences emerge and make sense (Yıldırım & Şimşek, 2011). Because phenomenology concerns how people detect, remember, evaluate, and transfer a concept, phenomenology, one of qualitative research patterns, have

been selected. In other words, phenomenology is a science that researches how people make sense, and comprehend their experiences and how transfer them into their minds (Patton, 2002). Therefore, in this study, in order to understand the mindset of individuals, metaphors which form a powerful mental structure (Palmquist, 2001) have been used as a tool to obtain data. When it is used as qualitative data tool, it is seen that descriptive function of metaphors comes to the forefront (Yıldırım & Şimşek, 2011).

**Data Collection Tool:** In this study, data collection tool have been developed by researchers. Data collection tool is composed of two parts. In the first part of data collection tool, there are questions to determine sex, department, demographic information of class, and in the second part, there are questions to determine the metaphors of participants about the concepts of ideal school, ideal student, and ideal teacher. In this context, prospective teachers have been asked to produce a metaphor for each of the concepts. For example, it has been asked to complete the sentence about the concept of school, “Ideal school is like ....., because....”.

**Data Analysis:** After data collection process is completed, data is going to be analyzed with content analysis. The purpose of content analysis is to reach the concepts that can explain data. The basic operation of content analysis is to get all data together in the framework of specific concepts and themes as well as to edit and interpret them (Yıldırım & Şimşek, 2011).

**Participants:** In this study, Faculty of Educational Science of Ankara University have been identified as sample case. In the academic year 2014-2015 at the faculty, there are total 422 first year students and total 510 fourth year student of six different programme types (Computer and Instructional Technologies Teaching, Preschool Teaching, Guidance and Psychological Counseling, Classroom Teaching, and Mental Retardation Teaching). The population, composed of 932 students, is accessible, for this reason, in this study, it has been tried to access to all population without using any sampling technique.

**Findings:** The data collection phase is ongoing. In this section, there are going to be the findings of the study.

**Results:** In this section, the findings are going be explained and discussed in the light of relevant literature.

**Recommendations:** Recommendations are going to be given after Results and Discussion parts are completed through findings of the research.

**Keywords:** Teacher Training, School, Teacher, Student, Prospective Teacher

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# **Assessing the Teaching Methods and Techniques Used by Academic Staff at Faculty of Education**

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Teaching is both art and science. It requires using various methods and techniques as well as motivation and dedication. Choosing the best method and applying it through teaching activities is one of the most significant variables that enhance students' learning (Aronson, 2007; Gibbs & Coffey, 2004). Various teaching techniques and methods have been invented by educational scholars so far (Joyce, Weil, & Calhoun, 2000). Each method provides different perspectives and outcomes to teach students. In general, students' learning depends on how the concepts being taught. Every student has a unique way of learning. Since students' learning styles vary, teachers should choose and apply relevant methods to accommodate different learning styles. Students' success tends to increase when professors use more and different strategies in class.

Students also can easily capture the relationships between the concepts they learn and the facts they will face in the future if the concepts are introduced with effective teaching methods by the professors (Pintrich and Garcia, 1994). In this way, the knowledge which they gain in the class will remain permanently and the students will be able to develop their knowledge for future. Accordingly based on students' perspective an ideal university professor should use different teaching strategies in class (Ergun, Duman, Kincal & Aribas, 1999).

## **Purpose**

The use of different teaching methods and techniques in universities has been an important issue in terms of increasing the quality of the education. This study basically examines the current status of the use of teaching methods and techniques among academic staff in Faculty of Education at Hacettepe University. The Faculty of Education produces high level thinkers and trains tomorrow's teachers. Therefore their use of teaching methods and techniques play a pivotal role in shaping the future generation to provide quality teaching in all level of education. The descriptive picture of teaching methods preferred by undergraduate programs at the faculty of education seems worthy to analyze in detail so it will enable us to assess the current situation and also to promote the dissemination of knowledge in a format that may provide academic staff with new insights that will result in decisions and strategies to develop their teaching.

## **Method**

This study aims to define current use of teaching methods and techniques among academic staff at selected undergraduate programs. To achieve this goal, a descriptive study design was used. The data was derived from Hacettepe University Bologna Process database which was officially recorded during 2014-2015 academic year. The University mandates all academic departments to post their program and course information online since 2013. For each course, instructor has to fill Course Information Sheet. Sheet has a teaching and learning techniques

part which course instructor has to indicate which teaching and learning techniques will be used for the course. The teaching and learning techniques listed in the course information sheet are Lecture, Discussion, Question and Answer, Observation, Field Trip, Team/Group Work, Role Play, Preparing and/or Presenting Reports, Demonstration, Experiment, Drill and Practice, Case Study, Problem Solving, Brain Storming and Project Design/Management. The course instructor could select more than one technique or she/he could specify any other technique that she/he will use for the course.

This study uses only some courses that offered in undergraduate programs at Faculty of Education. The courses are chosen from thirteen undergraduate programs at Faculty of Education. Among all courses within the curriculum, the courses which are delivered by the program itself were analyzed for this study. The undergraduate programs and number of courses that will be used for this study is presented in Table 1.

Table 1: Undergraduate Programs and Number of Courses

<b>Programs</b>	<b>Number of Courses</b>
Biology Teaching	87
Chemistry Teaching	69
Computer Education and Instructional Technology Teaching	44
English Language Teaching	56
French Language Teaching	36
German Language Teaching	56
Mathematics Teaching	64
Psychological Guidance & Counselling	47
Preschool Teaching	51
Primary School Teaching	75
Primary School Mathematics Teaching	47
Physics Teaching	61
Science Teaching Program	71
<b>Total</b>	<b>764</b>

Descriptive statistics will be used to compute the data. Frequencies and percentage values of variables will be determined with the analysis.

### **Findings**

Based on the analysis of data findings will be discussed.

### **Conclusions-Suggestions**

Conclusions and suggestions will be provided based on the findings of the research.

**Keywords:** Teaching methods, teaching techniques, faculty of education

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## **Investigation of Pre-Service Teachers' Innovative Approach in Terms of Different Variables**

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Every change affects institutions and organizations as well as communities and individuals. It is evident that all organizations need innovative strategies, new methods and solutions in the changing global competition environment. In this context, institutions and organizations, and even countries, are attempting innovation thrusts in order to adapt to changes. According to Elçi (2006), the cost is not the only determinant of competition advantage today. There are several factors involved such as product and service quality, design, new management and organization. All these factors are integrated in the concept of innovation. In this case, it has now become inevitable for both institutions and countries to make innovations.

As well as country-specific social dynamics, it is inevitable for education systems to be affected by changes in various fields such as scientific and technological developments, globalization and economic and political interactions between countries (Özdemir et al., 2013). In the process of change, individual or national success requires the skills of accessing , storing and managing information (Çakır & Yükseltürk, 2010). Generation of new information and giving a new form to existing information are acts related to innovation. There is a bidirectional relationship between innovation and education, and education is the foundation of innovation (Pehlivanoglu, 2011).

The single most important factor in educational organizations to make, sustain and achieve innovations is individuals' knowledge of innovative approaches and their willingness to put these into use. Training innovative individuals has started to become more and more important to deepen and spread innovation as a way of thinking in education. Teachers play a key role in training individuals who can meet the expectations of the globalizing world. The teacher is the most important factor in designing the educational environment in a way that it will gain the student today's and future skills. OECD (2012) emphasizes that higher education institutions should be the catalyst for innovation. In this context, the importance and effectiveness of pre-service teachers' and educators' role are obvious.

### **Purpose**

The main purpose of this study is to identify the innovative approaches of pre-service teachers, who will assume an important and effective role in structuring the innovation process in schools and the education system. For this purpose, the following sub-problems have been tried to answer:

- What is the innovative approach level of pre-service teachers?
- Do innovative approach levels of pre-service teachers change significantly according to following variables?
  - a. Gender
  - b. Way of Learning
  - c. Way of Studying
  - d. Motivation type

### **Method**

In this study, the purpose is not to make changes on variables, but to demonstrate the existing situation using the data collected from the participants through the survey method. Therefore, we used the scan pattern (Fraenkel et al., 2012).

### **Participants**

Research was conducted with 180 pre-service teachers studying in different branches. The distribution of pre-service teachers according to department/program was as follows: Computer Teaching 16.7% (n=30), Elementary Mathematics Teaching 35% (n=63), Elementary Science Teaching 27.8% (n=50), Primary School Teaching 20.6% (n=37).

### **Data Collection Tools and Data Analysis Techniques**

The data were collected for this study from two sources; demographic information (DI), Pre-Service Teachers' Innovative Approach Inventory (PIAI).

The first section focused on the demographic profile of the respondents such as name, gender, age, academic achievement and class. The section contained 9 items. This was followed by question on type of motivation. Pre-service teachers were asked to respond their type of motivation; external or internal.

The second section focused on Pre-service teachers' innovative approach PIAI developed by authors was used as the data gathering tool. PIAI is a 19 item questionnaire. For the answers to be given to the items, a 5-point Likert-type rating that is frequently used by the researchers

was preferred. Accordingly, the rating is as follows: “Strongly Disagree” (1), “Disagree” (2), “Undecided” (3), “Agree” (4) and “Strongly Agree” (5). PIAI scale has four dimensions which are social innovation, technological innovation, creativity, and risk-taking. The reliability coefficient of this scale is  $\alpha = 0.907$ .

We coded the digital data that were obtained from the data collection tools, entered them into the computer via the SPSS 21.0 package software and performed analyses based on lower problems. Before the analysis of the data, normal distribution was identified by applying Kolmogorov-Smirnov test. As a result of the analysis, it was determined that the data gathered has not normal distribution level ( $INA < .05$ ). For that reason, Mann-Whitney U and Kruskal-Wallis tests were applied in order to examine the impact of different variables on innovative approach.

### **Findings**

In this study, the average of the points pre-service teachers get from innovative approach (INA) is  $\bar{x} = 3.79 \pm 0.42$ . In the present case, it can be said that pre-service teachers are shown to express high level of positive opinion ("Agree" in the scale) for innovative approach. When mean values are evaluated within "Negative (<1.49)", "Neutral (1.60-3.40)" and "Positive (>3.41)", it can be seen that 79.4% of teacher candidates adopt innovative approach.

Whether the sub-dimensions and total scores of the scale of “INA” varied by gender were examined. When the results of the analysis made on the basis of the gender variable are considered, “INA” of the participants do not vary significantly by gender ( $U = 3314.5$ ;  $p = 0.795$ ;  $p > 0.05$ ).

Mean scores of the pre-service teachers with intrinsic motivators ( $\bar{x} = 93.28$ ) are higher than those of the students with extrinsic motivators ( $\bar{x} = 82.90$ ). However, this difference is not statistically ( $U = 3314.5$ ;  $p = 0.795$ ;  $p > 0.05$ ). As a consequence, it was accepted that mean scores of the groups did not differ by the variable of motivation.

The Kruskal-Wallis test showed that variable of way of learning did not a significant effect on INA ( $U = 3314.5$ ;  $p = 0.795$ ;  $p > 0.05$ ) and the sub-dimensions. As a consequence, it was accepted that mean scores of the groups did not differ by the variable of way of learning.

The Mann-Whitney U test showed that variable of way of studying did not a significant effect on INA ( $U = 2214.00$ ;  $p = 0.101$ ;  $p > 0.05$ ) while they differed significantly in the sub-dimension of risk-taking ( $U = 2126.00$ ;  $p = 0.049$ ;  $p < 0.05$ ). As a conclusion, it was accepted that score averages of the population differed in favour of the participants having individual study in the sub-dimension of risk-taking of the “INA” scale.

### **Conclusions and Suggestions**

The results of the analysis of the data obtained in the present study showed that the ICT skills of the students correspond to 3.79 in the 5-point Likert-type scale, in other words, their innovative approach levels are high.

The innovative approaches of participants were studied according to gender, way of learning, way of studying and motivation type. It was determined that the variable of gender, motivation type and way of learning did not lead to significant differences in the INA of the

pre-service teachers as well as the sub dimensions. When the relationship between INA and way of studying was analyzed, it was found out that there is a meaningful difference between the points of individual and group study, and this difference is in favor of individual study.

Two recommendations can be made in relation to this study. Firstly, similar studies examining which variables are influential on the levels of innovative approach should be conducted with larger samples In the second place, similar studies can be conducted with the different study group such as school administrators, Undergraduate and Graduate students.

**Keywords:** innovative approach, pre-service teacher, innovation

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## **The Perceptions of Pre-school Teachers Regarding Competencies in the context of Critical Multicultural Education**

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Development and learning processes are universal. However, the upbringing of a child including the preschool period takes place in certain social and cultural settings (Brooker & Woodhead, 2010). Although there are universal principles as to how children develop and learn, in practice, the development and learning of a child are shaped by the conditions he/she is in (Penn, 2010). In other words, the development and learning of a child are shaped as much by cultural values as the economic and structural inequalities that influence the capacity of parents who are responsible for the upbringing of children. Supporting the development of a child means supporting and respecting the parents and the society that raise and care for that child.

Children learn in many different and diverse ways such as by using all their senses, by imagining, imitating, interacting with others, playing, inquiring etc., (ECCD, 1993). Therefore, in addition to facilitating social and emotional development, a number of learning activities that are compatible with the culture of a student should also be utilized to facilitate learning from a cognitive point of view. This is so because according to the constructivist point of view learning is a meaning generation process students engage in response to the new ideas and experiences they encounter at school. In this interpretation process, students use the mental structures they have stored in their mind (such as knowledge frameworks, schemas, mental models and personal development theories as put forward by cognitive theorists), their previous knowledge and beliefs to make sense of the new input (Glaserfeld, 1995; Piaget, 1977). In this context, the information that children bring to school which is derived from their personal and cultural experiences is at the center of their learning (Villegas and Lucas, 2002). Learning experiences should be related to culture specific experiences and perspectives and be structured to reflect these for students who come from different cultural backgrounds. This need reflects the fact that learning new ideas is more effective when they are associated with previous knowledge (Gay, 1994). This situation makes it necessary for teachers to not only know the topic they will teach but also to get to know their students closely, learn about their experiences and the impact of these experiences on their learning. Teachers also need to know the culture of their students, their culture specific attitudes and behaviors, their culture specific learning styles and teachers should have skills to utilize the teaching and evaluation strategies that are compatible with these (Gay, 2004). Therefore, the competencies of teachers who will be working with a culturally responsive teaching approach will naturally differ and also these teachers need to possess cultural competencies.

This study aims to determine the perceptions of preschool teachers regarding competencies in the context of critical multicultural education. The aim of this study is to determine the difference between the present situation and the target situation. It is expected that the findings from this study will contribute to the identification of priorities in the teacher training

system. The study is designed in line with qualitative research methods and the data is collected through the Eleştirel Çokkültürlü Eğitim Yeterlikleri Ölçeği, EÇYÖ (Scale for Critical Multicultural Education Competencies, SCMC) (Acar-Çiftçi, 2014). The study consists of two parts. The first part includes a personal information form and the second part includes the scale. SCMC (Scale for Critical Multicultural Education Competencies, SCMC) consists of 4 sub-dimensions: awareness, knowledge, skill and attitude. The scale which consists of 42 items can be used on a single dimension and has a reliability coefficient of .85. The universe for the study comprises the teachers who work at preschool institutions in Istanbul that report to the Directorate of Basic Education. Only public schools were included in the universe of the study and private schools were excluded. “Stratified cluster sampling” which is a combination of cluster sampling used in cases where listing all population elements in the sample is very hard and “stratified sampling” which ensures that sub-groups in the universe are included is used in creating the sample (Balçı, 2010, 93-94). A total of 120 preschool teachers, 7 males and 113 females, took part in the study. All the data collected from the participants through the survey was analyzed with SPSS 17.0 Windows package. The data collected in the personal information part of the survey were treated as independent variables whereas the data from the scale were treated as dependent variables in the analysis.

The results of the study indicate that teachers consider themselves competent in the skills and attitudes dimensions of the culturally responsive teaching whereas they consider themselves partially competent in the information and awareness dimensions. Additional findings from the study indicate that teachers’ perceptions of their cultural competencies and related sub-dimensions differentiate significantly as a result of type of alma mater, gender, age, ethnic origin and mother tongue variables.

**Keywords:** preschool education, preschool teachers, critical multicultural education competencies

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## Corrective Feedback in Foreign Language Education in Turkey

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Corrective feedback (henceforth, CF) is any reaction of the teacher which clearly transforms, disapprovingly refers to, or demands improvement of the learner utterance (Chaudron, 1977). According to Lightbrown and Spada (1999), it is an indication to the learners that his or her use of the target language is incorrect. Responses to L2 learners' non-targetlike production form CF as indication of an error has been committed, replying correct form of target language and meta-linguistic explanation of the error or any combination of these feedbacks (Ellis, et al. 2006). Due to its applications in second/ foreign language classrooms, it has received increasing attention from scholars who conduct research on second language instruction. This study investigates CF types used in primary classrooms in Turkey, where English is taught as a foreign language and a compulsory part of the national curriculum. 36 teachers working with students of various grades in 20 state primary schools in Turkey participated in the study. Namely, it is intended to reveal types of corrective feedback mostly used by teachers in the classrooms of 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> graders in response to learners' spoken errors, the most effective type of teacher corrective feedback that lead to successful student uptake (repair), and whether the way teachers provide corrective feedback differs across different grades. Accordingly, EFL classes assigned to these teachers were video-recorded throughout a semester, and the communication between teacher and students when spoken errors were committed by the students was transcribed by the researchers. In a follow-up session, these errors and CF types employed by the teachers were identified following the classification proposed by Lyster and Ranta (1997) and updated by Lyster et al. (2012). Lastly, CF types led to learner uptake during those classes were recorded. The study has indicated that all types of corrective feedback were used by the teachers to help students overcome errors they made in classes of various grades and that explicit correction was the most and peer correction was the least frequently used CF types in all four grades. As for student uptake, clarification request, elicitation, metalinguistic feedback and paralinguistic feedback proved the most successful CF types whereas explicit correction resulted in relatively less self-repair in the cases it was employed. The study has also shown that CF types that mostly lead to successful uptake showed great variety across grades. 4<sup>th</sup> graders were observed to come up with most uptake when metalinguistic feedback was used to correct their ill-formed utterances in the target language while this position was fulfilled by clarification request in classes of 5<sup>th</sup> graders. As for 6<sup>th</sup> graders, elicitation and clarification requests appeared relatively more functional in overcoming their errors. Finally, 7<sup>th</sup> graders seemed to do better when clarification request and metalinguistic feedback were used for correcting their errors. All in all, EFL teachers working at primary state schools display a

tendency to use explicit types of corrective feedback such as explicit correction and metalinguistic feedback, which might correspond to the fact that interlanguage development of young EFL learners seem to reflect more on explicit language learning strategies as their cognitive development. So, it might be suggested that they should be employed in language classrooms only as a last resort. Instead, implicit feedback types such as clarification request and elicitation might be recommended to use in EFL settings as they have proven effective techniques –particularly in the classes of 6<sup>th</sup> and 7<sup>th</sup> graders. In a similar vein, paralinguistic signals were strongly recommended for correcting errors of students regardless of their grades inasmuch as they are considered to save time in EFL classes and more likely to lead to uptake in case of errors. Further studies might be conducted on CF types used in different grades at secondary schools or with the participation of university students attending English preparatory programmes. The study might also be furthered to include the investigation of CF types used to handle written errors of students of different proficiency levels in the target language.

**Keywords:** Corrective feedback, CF type, uptake

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# Digital Game-Based Language Learning in Foreign Language Teacher Education

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Digital game based language learning (DGBLL) has received increased attention especially in recent decades since successful implementations have been reported in various studies (Müller, 2012; Peirce & Vade, 2010; Kocaman and Kızılkaya-Cumaoğlu, 2014a; Roy & Schleminger, 2014). However, its implementation is far from expected and desired levels due to technical, instructional, financial and sociological barriers. Teachers and parents may have negative opinions as these games are considered to cause addiction, wasting time and violence (Demirtaş Zorbaz et al., 2014). Moreover, the number of studies focusing on languages other than English, or investigating the use of serious games with longer scripts and implementations of DGBLL with pre-service teachers are very limited. As stated by Backlund and Hendrix (2013), no longitudinal empirical study has been conducted so far.

Teachers' aspects are the least explored issue in DGBLL studies. In addition, the studies conducted so far on teachers' attitudes towards DGBLL have not consistently produced positive results. Indeed, the findings of the previous research are quite contradicting since positive, unsure and negative attitudes have been reported in various studies. However, the widely-held view is that teachers do not always have positive attitudes and they are not as enthusiastic as the learners in using digital games in classrooms. Even in cases where teachers' positive attitudes were reported, it has been shown that they have low digital game literacy and DGBLL pedagogy (Karadağ, 2015; Millstone, 2012; Yılmaz İnce & Demirbilek, 2013), which was observed especially with elder generation teachers (Blamire, 2010). In cases where teachers were unsure in using digital games, it was clear that they were actually interested in integrating these games but worried about the classroom implementation due to various pedagogical and technical constraints. Findings of the previous research suggest that there is a need to establish teacher training courses in order to support adaptation of game based learning pedagogy through helping teachers experience the digital games themselves before they are expected to use them in teaching.

The purpose of this study as a part of a larger project is to investigate the contributions of serious games with long scripts to the development of professional language skills of pre-service German teachers. In other words, the study aims to examine the status of utilizing m-learning applications and educational digital games in foreign language teaching, to identify the determining reasons behind the shortfalls in applications and to explore ways of contributing to the linguistic and professional development of pre-service teachers.

A serious game developed by the Goethe Institute was chosen for this study: A Mysterious Mission (MM) which is designed for the development of professional language skills. Pre-service teachers (n=60) played the MM, a role-play game. The applications were integrated into the regular curriculum in “Instructional Technologies and Materials Design” course as an eight-week activity. A quasi-experimental method consisting of pre and posttests was applied to measure the contribution of the game to the development of pre-service teachers’ linguistic skills. A separate vocabulary test consisting 620 words was used to measure the success in learning professional terminology. In addition, a scale developed by Kocaman and Kızılkaya (2014b) was used to identify the participants’ vocabulary learning strategies. For qualitative data collection, a game diary and semi-structured interviews were used. The pre-service teachers’ perceptions on the whole process were elicited through these semi-structured interviews. The results of vocabulary pre and posttests were analyzed using SPSS and compared to demographic variables and learning strategies.

The results of the study show that serious games integrated within the framework of DGBLL contributed greatly to the pre-service teachers’ professional language skills; in addition, data obtained through game diaries and semi-structured interviews provide evidence that the teacher candidates acquired positive attitudes in using these games in their teaching in the future. This is crucial in gaining a prospective view of foreign language teacher education when the barriers that prevent teachers from using serious games in their classrooms are considered.

**Keywords:** Digital game-based language learning, Serious games, Foreign language teacher education, German learning

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**THEME 2:**  
**New Directions on Curriculum Studies**

## **Investigation of Hypothetico-Creative Reasoning Skills of Teacher Trainees in Terms of Their Scientific Epistemological Beliefs**

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The aim of this research is to investigate hypothetico-creative reasoning skills in terms of scientific epistemological beliefs. Hypothetico-Creative reasoning skills can be defined as a reasoning skill based on six inner dimensions of Lawson's hypothetico-predictive reasoning skills which are hypothetic reasoning, proportional reasoning, controlling variables, probabilistic reasoning, correlational reasoning and combinational reasoning (Lawson, 1995: 61-62), and six outer dimensions of creative thinking skills based on the literature research which are analogical thinking, convergent thinking, divergent thinking, metaphorical thinking, vertical thinking and lateral thinking through data-information-knowledge-episteme conversion and extraction processes in order to construct epistemological beliefs (briefly episteme) about scientific or general concepts (Duran, 2014: 91-92).

In the literature research such as Perry's classification of epistemological beliefs, Kuhn's, Schommer or King ve Kitchener's classification of epistemological beliefs (Aksan and Sözer, 2007, Acat, Tüken and Karadağ, 2010, Özbaş and Aslan, 2012, Moseley et al., 2005) epistemological beliefs are mainly classified in two opposite sides, one is absolutists, the another one is relativists which is said to be similar in philosophical debates on the nature of knowledge since the ancient Greek philosophy. Hence scientific epistemological beliefs can be defined as beliefs and coherent philosophical views toward the nature and philosophy of science. The target population of this study consists of Ondokuz Mayıs University Education Faculty students. In this study maximum variation technique which is among the purposeful sampling techniques was used to choose the target population. In this sampling technique the aim is to find the similarities among diverse cases rather than making generalization about those cases and hence reckon with the different aspects of the problem in different dimensions (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2009). The population of this research consists of the students in 2013-2014 education period in Ondokuz Mayıs University Education Faculty in the department of 2<sup>nd</sup> grade of German Language teacher training (23), 4<sup>th</sup> grade of French Language Teacher Training (21), 4<sup>th</sup> grade of German Language Teacher Training (53), 4<sup>th</sup> grade of Turkish Language Teacher Training (18), 2<sup>nd</sup> grade of Elementary School Teacher Training (24), 2<sup>nd</sup> grade of Elementary School Teacher Training (31), 2<sup>nd</sup> grade of Counseling and Guidance Department (76), 4<sup>th</sup> grade of Counseling and Guidance Department, 3<sup>rd</sup> grade of High School Physics Teacher Training (15), 3<sup>rd</sup> grade of Science Teacher Training (31), 3<sup>rd</sup> grade of Preschool Teacher Training (29), 2<sup>nd</sup> grade of the Department of Special Education (38) which sum up in total to 400 students.

Data for scientific epistemological beliefs that has five dimensions which are purpose of science, changeability of science, role of experiments in developing scientific theories, coherence of science and source of science knowledge and the relationships between the constructs, have been obtained by Scientific Epistemological Beliefs Inventory developed by Elder (1999) and adapted to Turkish by Acat, Tüken, and Karadağ (2010). Data for hypothetico-creative reasoning skills that also have five dimensions which are hypothetic and creative thinking, proportional reasoning, controlling variables and combinational reasoning, probabilistic reasoning, correlational reasoning have been obtained by Hypothetico-Creative Reasoning Skills Inventory developed by Duran (2014).

Correlational comparative survey method was used in our analysis. Firstly the dimensions of hypothetico-creative reasoning skills and epistemological beliefs determined in terms of some variables. Secondly, correlation analysis was done between hypothetico-creative reasoning skills and scientific epistemological beliefs. To summarize, at the end of this research it was revealed that there is a significant relationship between hypotheticocreative reasoning skills and scientific epistemological beliefs.

**Keywords:** Epistemological Beliefs, Hypothetico-Creative Reasoning Skills, Creativity

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## **The Analysis of the Views of English Teachers about 2<sup>nd</sup> Grade English Curriculum**

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In Turkey, twelve years compulsory and progressive education initiated instead of eight years non-stop compulsory education starting from the academic year of 2012-2013 and twelve years was divided into three stages. The first stage is four years primary school, the second stage is four years middle school and the third stage is four years high school (MNE, 2012). Through this implementation, the age to start school has become six years old. Moreover, there have been important changes in foreign language teaching policies in Turkey.

When curriculum studies in foreign language teaching in Turkey are analyzed, it is seen that compulsory foreign language teaching practices at an early age are applied as in the European Union countries (Enever, 2009). Foreign language teaching starts at the 2<sup>nd</sup> grade from the academic year of 2013-2014, which was at the 4<sup>th</sup> grade before (MNE, 2012). Therefore, a 2<sup>nd</sup> grade English curriculum was developed (MNE, 2013).

This research aims to find out the views of English teachers about 2<sup>nd</sup> grade English curriculum. The research was designed by using qualitative method. Illuminative evaluation model was also used in this study. Illuminative evaluation model is used to evaluate innovative programs (Parlett and Hamilton, 1977). The data were collected from 21 English teachers who were teaching 2<sup>nd</sup> grade classes in Usak through semi-structured interviews during the spring semester of 2013-2014 academic year. The interviews were analyzed through both descriptive and content analysis. In the descriptive analysis, the data received are summarized and commented according to the themes which are determined before (Yıldırım and Simsek, 2011). Content analysis can be defined as the summary of a text with smaller content categories via coding (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel; 2010).

When the data were analyzed, it was found that the findings gathered under five themes as ‘Basic Dimensions of the Curriculum’, ‘Problems Teachers Met’, ‘Strengths’, ‘Weaknesses’ and ‘Recommendations’. The research data showed that teachers mostly believed the aims of the program were appropriate for students’ age level and the content of the program was interesting for students. Furthermore, teachers stated that students enjoyed student-centered methods and techniques such as drama, games, collaborative learning. Moreover, most of the teachers supported that speaking and listening skills should be the core aims of the program. However, some teachers thought that reading and especially writing skills should also be focused in the program in addition to speaking and listening.

Besides, the teachers stated that they had problems such as ‘learning environment’, ‘planning’ and ‘course book’ while conducting the program. They believed that lack of technological infrastructure and in-service training programs for teachers caused them not to teach

effectively. Also, they expressed that the course book did not arrive schools on time and course book sent to them by the Ministry of National Education was insufficient in terms of exercises.

Moreover, the teachers believed that the program let students begin to learn English at an early age, which had cognitive and affective advantages for students. Also, the program was strong according to teachers' views because it was applicable for second grade students. However, the teachers expressed negative views about the applicability of the program in different learning contexts. They stated that it was hard for teachers to implement the program in crowded and technologically-inefficient classrooms. Also, they mostly said that the type and amount of the activities were not enough for second grade students.

The teachers also made some recommendations for the program. They told that planning should be better in the following years with in-service training programs for teachers, timely distribution of course books and provision of the CD's with the course book.

Based upon the findings, it can be recommended that the content sequence of the curriculum is reorganized. It is also important that teachers are supposed to be offered in-service training programs about the new curriculum and child pedagogy. Moreover, since the curriculum is based on visual and audial methods and techniques, the technological facilities of the schools should be developed.

**Keywords:** Primary school 2<sup>nd</sup> grade, young learners, 2<sup>nd</sup> grade English teachers, views

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# **Development, Implementation and Evaluation of Peer Education Program Towards Students with Special Requirement**

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An well-structured peer education is quite important in terms of qualification of inclusive education. Studies on peer education in Turkey are insufficient. In the literature on this subject, it has not been encountered a program prepared on the purpose of being made use of peer potential in inclusive education. Therefore, it is needed the development, implementation and evaluation of “Peer Education Program Towards Students with Special Requirement”. Program has a place in setting an example to program development and evaluation studies on the education of peer counselors. At the end of the program, attendance of students with their friends with special requirements to marbling art training and being drawn from interviews and observations during marbling art training are significant contributions brought by this research to the field.

## **Method:**

It has been implemented mixed research method on the study aspiring development, implementation and evaluation of “Peer Education Program Towards Students with Special Requirement” in order to make use of mutually complementary characteristics of quantitative and qualitative research methods. From the mixed research methods collected under six titles by Creswell and Clark (2011), the concurrent nested design has been preferred. As program evaluation model, CIPP model formed by Daniel Stufflebeam has been chosen.

## **Study Group:**

The study group of the research has been constituted by three educator who trained 15 students attended to “Peer Education Program Towards Students with Special Requirement” in a state school located in Mamak, Ankara between 15th and 19th of April in 2013. Students were selected according to the convenience sampling method from the four sampling types discussed by Teddlie and Yu (2007) on their studies.

## **Data Collection and Analysis:**

It has been drawn from observation, interview forms and document reviews as collecting data with intent to determine if the research achieved its purposes or not. Datum obtained from educator’s observing forms were analyzed giving percentages and frequencies. Other collected datum were evaluated qualitatively being limited to descriptive analysis.

## **Findings and Interpretation:**

According to the findings attained at the end of the research, capacity of the school which the program were implemented is adequate. As analyzing requirements of the program, opinions of students required special education, parents, educators at the school which the education would be given in, members of school council and domain experts had been received. It had been observed that constituents of the program which were attainment, content, learning

experiences and evaluation showed consistency with each other. It had been observed that evaluations showed consistency with attainments. Educators had been selected from competent individuals in order to implement program. It had been beheld that three educators who took charge in implementation of program did not feel out of program documents and they used these documents effectively as they actively participated in the process of program development. Case studies written by students, prepared posters had been used as evaluation documents and it had been demanded self-assessments from students. Educators used evaluation documents effectively and they gave essential feedbacks instantly. In addition, at the end of the program, students attended to marbling art training with their friends required special education had been observed and it had been endeavored to determine if they achieved attainment or not. At the end of the program, and evaluation related to program had been requested from students, and it had been asked if there were subjects the students were impressed, utilized from or asked further information about or not. It had been observed that students were quite eager to carry out the evaluation and they used notions related to program attainments easily such as “the individuals who need special education”, “the difference between notion of obligation and notion of responsibility” in their evaluations. Particularly, researchers found opportunity of observation of students’ reactions to works of their friends required special education, the communicative language they preferred, their supportive friend behaviors and their avoidance of disincentive friend behaviors during marbling art training. At the last session, it had been beheld that students used notions correctly, stated that to assist individuals required special education was an important responsibility while they did not mention supportive and disincentive friend behaviors in their self-assessments. It had been seen that students behaved encouraging to their friends required special education, they tried to be helpful when their friends lost their attention or strained and they did not act frustrately to their friends during marbling art training. In the light of these findings, it had been determined to be achieved to the program attainments.

### **Conclusion:**

When Peer Education Program Towards Students with Special Requirement is evaluated, it is seen that the program is considerably beneficial in the sense that students have knowledge of peer education at fundamental level and make acquainted with the notions of peer education. The observations about marbling art training performed after peer education show that students reach the program attainments. Besides, educators’ findings on self-assessment forms corroborates this result. Educators has stated that selected activities and evaluation methods are compatible with students’ level as well as they find program sufficient in respect to content and attainment.

### **Implications:**

Suggestions brought in order to make program more successful has collected under four titles. Peer education programs have great importance to enhance the qualification of education towards individuals who require special education. When students had peer education starting from the very first years of education, the qualification of inclusive education could be enhanced. Outlasting programs could be prepared in order to bring peer counselors in skills they may need. These educations could be provided for more students at different times in institution to raise effectiveness of peer education programs. Educators could draw from the potential in their classes by receiving in-service training.

**Keywords:** Peer education, inclusive education, program evaluation

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# Correlation Between Teachers' Educational Philosophy Beliefs and Their Teaching-Learning Conceptions

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As widely accepted today, there are five major educational philosophies, namely progressivist, existentialist, perennialist, essentialist, and reconstructive in the literature. Educational philosophy beliefs adopted by teachers play an important role in classroom applications and schooling. Also, every teacher has an educational philosophy belief, which he/she is aware or not, is thought to determine their teaching-learning conceptions as well as their classroom applications. If teachers have perennialist and essentialist beliefs of educational philosophy, it is considered that they adopt traditional ways of teaching-learning process. Moreover, it is also thought that if teachers have progressivist, existentialist, and reconstructive beliefs of educational philosophy, they are more inclined to adopt constructivist teaching-learning process in the classroom at school. Hence, with these in mind, it is posited that beliefs of teachers on educational philosophy may play a crucial role on their conceptions towards teaching-learning at school. So, this might guide teachers on their profession as well as their teaching-learning conceptions that they adopt in classroom settings and applications.

## Purpose

The purpose of this research was to investigate the correlation between teachers' educational philosophy beliefs and their teaching-learning conceptions. In order to establish a correlation between teachers' educational philosophy beliefs and their teaching-learning conceptions, the following questions were posed in the study: (i) Is there a significant correlation between teachers' educational philosophy beliefs and their teaching-learning conceptions? (ii) What is the predictive level of teachers' educational philosophy beliefs for their teaching-learning conceptions?

## Method

The correlative investigation model was used in the research (Büyüköztürk et al., 2012). This model is one of the most commonly applied models in the related literature (Cohen et al., 2003). The participants of the study consisted of teachers ( $n = 215$ ) from five high schools of Nigde province in Turkey. "The educational beliefs scale" (Yılmaz, Altınkurt, & Çokluk, 2011) and "teaching-learning conceptions scale" (Chan & Elliot, 2004) were used in order to find answers to the questions of the research. The Pearson moment's correlation coefficient analysis was used in order to determine the correlation between variables and the multiple regression analysis was used to determine the prediction level of teachers' educational philosophy beliefs for their teaching-learning conceptions.

## Findings

According to the findings obtained in the research, it was found out that there were significant correlation between teachers' educational philosophy beliefs and their teaching-learning conceptions. There was a significant positive correlation between teachers' reconstructive ( $r = .482$ ), existentialist ( $r = .431$ ) and progressivist ( $r = .585$ ) educational philosophy beliefs and

constructivist teaching-learning conception. Also, it was found that there was a significant positive correlation between teachers' perennialist ( $r = .226$ ) and essentialist ( $r = .193$ ) educational philosophy beliefs and traditional teaching-learning conception. On the other hand, it was also found out in the study that teachers' educational philosophy beliefs were a significant predictor of their teaching-learning conceptions and approximately 50% of the total variance for teachers' constructivist teaching-learning conception ( $R = .709$ ,  $R^2 = .502$ ,  $F(5.209) = 42.153$ ,  $p = .000$ ) and 11% of the total variance for teachers' traditional teaching-learning conception ( $R = .327$ ,  $R^2 = .107$ ,  $F(5.209) = 5.016$ ,  $p = .000$ ) were explained by their educational philosophy beliefs. In the light of the data gathered, it can be stated that teachers' educational philosophy beliefs appear to be a significant predictor of their teaching-learning conceptions.

### Conclusions

According to findings of the study, it was concluded that there were positive significant correlations between teachers' educational philosophy beliefs and their teaching-learning conceptions. There was a significant positive correlation between teachers' reconstructive, existentialist and progressivist educational philosophy beliefs and constructivist teaching-learning conception. Also, it was found that there was a significant positive correlation between teachers' perennialist and essentialist educational philosophy beliefs and traditional teaching-learning conception. On the other hand, it was also found out in the study that teachers' educational philosophy beliefs were a significant predictor of their teaching-learning conceptions.

**Keywords:** Educational philosophy beliefs, teaching-learning conceptions, Turkish teachers, correlational analysis.

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# High School Students' Conceptions of Learning and Instruction: A Study of Metaphor Analysis

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In the last two decades, it has been recognised that metaphors are not just rhetorical devices, but powerful cognitive tools that help people in building or/and grasping new concepts (Lakoff & Johnson, 1980; Lakoff, 1993). As one of the most important mechanisms of the human mind, metaphors are the mental structures reflecting people's beliefs, emotions, thoughts, and self-related images by means of which they understand and act within their mental worlds (Lakoff & Johnson, 1980; Lakoff, 2009).

## Purpose

In this study, high school students' metaphorical conceptions about learning and instruction are examined, unlike the vast amount of research investigating the metaphorical conceptions used by prospective and in-service teachers. It is believed that understanding metaphorical conceptions of students regarding learning and instruction might help teachers to design the learning environment better. So, it is posited that metaphorical conceptions of students about learning and instruction affect classroom practices. Therefore, the present study aims to fill the stated gap by exploring students' metaphorical conceptions about learning and instruction.

## Method

In this study, we used the "phenomenological research design", one of the qualitative research designs to examine high school students' metaphorical conceptions about learning and instruction. According to Patton (1990), "a phenomenological study is one of that focus on description what people experience and how it is that they experience what they experience" (p. 71). The participants of the study were 1.082 volunteering students enrolled in three different public high schools in Nigde province in Turkey.

We collected the data during 2014-2015 academic year and translated them into English. With the aims of identifying high school students' metaphorical conceptions about learning and instruction, we asked each participant to complete the prompts "Learning is like... because..." and "Instruction is like... because..." by focusing only one metaphor for each prompt. We gave the participants one class-hour (40 min. duration) to write about a metaphorical image that represented their thoughts about learning and instruction. We did it so because we wanted to know participants' immediate reactions towards learning and instruction concepts.

We analysed the data with the content analysis, which is a widely used qualitative research technique in the related literature (Merriam, 1998; Miles & Huberman, 1994). We collected the data that we collected by the following steps of the metaphor analysis methodology in the study (Moser, 2000). We adopted the following steps, proposed by Saban, Koçbeker, and

Saban (2006, 2007) in the analysis of the metaphors of the current research. The steps suggested by Saban, Koçbeker, and Saban (2006, 2007) in the analysis of metaphors in a research can be summarised as: *i.* naming/labelling stage, *ii.* sorting (clarification and elimination) stage, *iii.* sample metaphor compilation and categorisation stage, *iv.* establishing the validity and reliability stage, and *v.* analysing the data quantitatively stage.

## Findings

High school students participated in the study produced a total of 46 well-structured metaphors for “learning” concept and a total of 25 well-structured metaphors for “instruction” concept. In the research, Science High School (SHS) students produced 71 metaphors, Anatolian High School (AHS) students generated 70 metaphors, and Vocational High School (VHS) students developed 58 metaphors both for learning and instruction concepts. The top five dominant metaphors included the following for *learning* concept: (1) book ( $n = 63$ , 5.82%), (2) tree ( $n = 61$ , 5.63%), (3) reading ( $n = 52$ , 4.80%), (4) water ( $n = 48$ , 4.43%), and (5) teacher ( $n = 47$ , 4.34%) and for *instruction* concept: (1) sun ( $n = 78$ , 7.20%), (2) carpentering ( $n = 71$ , 6.56%), (3) teacher ( $n = 61$ , 5.63%), (4) planting tree ( $n = 59$ , 5.45%), and (5) painting ( $n = 57$ , 5.26%) in the study. Of the total 71 metaphors produced in the study, 28 were about activities (e.g., watering, composing, acting), 2 were about human beings (e.g., teacher), and 69 were about inanimate things and/or objects (e.g., computer, book, cooking). Besides, out of 71 total metaphors, only one of them was formulated by SHS students (e.g., vegetable), and the rest of them were produced mutually by SHS, AHS, and VHS students. On the contrary, a total 58 metaphors were common amongst all the participating students from three different high schools in the research. Also, a total of 70 metaphors were produced by those students from at least two high schools. Furthermore, we observed that female students produced more metaphors than their male peers in the study. Out of 71 metaphors produced in the study, 40 metaphors were generated by only female students, whereas 31 metaphors were formulated only by male students. Finally, we discovered five main conceptual categories for learning and four main conceptual categories for instruction. The main conceptual categories for learning were: *i.* learning as a basic human need, *ii.* learning as a cultivating activity, *iii.* learning as a source of knowledge, *iv.* learning as a challenging process, and *v.* learning as a joyful activity and for instruction were: *i.* Instruction as an art, *ii.* instruction as a cultivating facility, *iii.* instruction as a constructive process, and *iv.* instruction as knowledge provider in the study.

## Conclusions

In the present study, we investigated high school students’ metaphorical conceptions about learning and instruction. Although we think that this study has been a simple attempt to understand the metaphorical conceptions about learning and instruction of high school students, we have found several major understandings about these two concepts in the research. The results of this study designed with the purpose of investigating high school students’ conceptualisations about learning and instruction using metaphors draw attention to a few important points. The metaphorical images collected throughout this study about “learning” were grouped under five conceptual categories. Most of the metaphors reflecting the students’ images of learning were clustered in the categories of “learning as a basic human need” ( $n = 11$ ), “learning as a source of knowledge” ( $n = 10$ ), “learning as a challenging process” ( $n = 10$ ), and “learning as a cultivating activity” ( $n = 9$ ). On the other hand, unlike the four dominant conceptual categories we identified, there was one (i.e., learning as a joyful activity) category that was not very popular ( $n = 6$ ) in the study. Also, the top five dominant metaphors for learning in the study were “book” (5.82%), “tree” (5.63%), “reading” (4.80%), “water” (4.43%), and “teacher” (4.34%). Unlike the five most dominant metaphors, there were also those that were not very popular were “vegetable” (0.09%), “sitting at a café” (0.46%), and

“sun” (0.46%) in the research. In regard of the metaphorical images collected throughout this study about “instruction” were grouped under four conceptual categories. Most of the metaphors reflecting students’ images of instruction were clustered in the categories of “instruction as an art” ( $n = 9$ ), “instruction as a cultivating facility” ( $n = 7$ ), “instruction as knowledge provider” ( $n = 7$ ), and “instruction as a constructive process” ( $n = 4$ ). On the other hand, unlike the three dominant conceptual categories we identified, there was one category (i.e., instruction as a constructive process) that was not very popular ( $n = 4$ ).

**Keywords:** Learning and instruction, metaphor analysis, phenomenological research, high school students.

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# Investigation of Secondary School English Teachers' Views on Developing Learner Autonomy of Students

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Contemporary approaches in language education is to consider learner development as a progression that contains both the acquisition of eligible knowledge and skills and the inquisition of learning styles and strategies, and successively, how they affect the ways that students proceed. The language teaching have currently become more communication oriented, and as a result of this tendency, the traditional classroom teaching is being confronted with a grand challenge and is being replaced by a learner-centered one, which essentially takes the learner into consideration (Breen and Mann, 1997). In such a classroom circle, the teacher doesn't play a role as a control mechanism that controls the class and gives strict directions and instructions about what to do and how to do it. Rather, the teacher acts as a facilitator, helper, knower and consultant, who guides students in accordance with their requirements and who gets in touch, and collaborates, with them for the main intention of organizing the classroom environment where students are given the chance of taking encumbrance of their learning at the very most (Camilleri, 1999). This learner-centered approach in English as a Foreign Language (EFL) and English as a Second Language (ESL) has unveiled the notion of learner autonomy which has been defined by Holec (1981) as "the capacity to take charge of one's own learning". To take charge of one's learning is to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning, i.e.:

- Determining the objectives,
- Defining the contents and progressions,
- Selecting methods and techniques to be used,
- Monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.),
- Evaluating what has been acquired (Holec,1981).

Language teachers without any autonomy-oriented training may experience difficulties in creating such a classroom culture. Hence, the earlier language teachers who are in support of the principles of autonomous learning are made aware of the importance and necessity of learner autonomy in their initial teacher training, the more easily they will be able to implement this approach in their own future classrooms (Balçıkanlı, 2010).

## Purpose

This study aims to investigate secondary school English teachers' views on developing learner autonomy of students. For this aim, the views of secondary school English teachers on developing learner autonomy of students are examined whether there is meaningful difference according to gender, age and seniority.

## Method

This descriptive study is designed as survey model. The population of the research includes English teachers who work at secondary schools in cities of Samsun, Kahramanmaraş and Manisa as cities with populations of over one million and the sample of study is composed of

totally 415 secondary school English Teachers, 284 of which are working at Samsun, Manisa and Kahramanmaraş and 131 of which have completed the online questionnaire including 32 closed-ended questions with 5-point likert type developed by Camilleri (1999). Data were analyzed by using ANOVA, independent samples t-Test, Kruskal Wallis.

### **Findings and Conclusions**

According to data derived from the study, there are meaningful differences among secondary school English teachers views on developing learner autonomy of students depending upon variables of age, gender and seniority. According to the findings obtained from the study, male teachers' views on students' participation to the decisions about course achievements or goals in the short term, decision of the topics at lessons, selection of learning tasks, decisions on seating arrangement are more supportive for developing learner autonomy relatively to female teachers, while female teachers' views on supporting students' learning process with self-discovery are more supportive for developing learner autonomy of students. It is found that teachers between age of 32 and 36 are more supportive of learner autonomy relatively to other age groups on students' participation to the decisions about course achievements or goals in the long term. Teachers between 22 and 26 years old are relatively more supportive of developing learner autonomy with their views on students' participation to decisions of the pace of the lesson, individual/pair/group works, usage of materials, the variety of classroom activities, positions of desks, what to learn from audio-visual aids and encouraging students to learning process with self-discovery, leading them to find their own explanations to classroom tasks and self-assessment. Teachers who have 1-5 years of experience demonstrates a more learner autonomy supportive views for students' participation to decisions of the pace of the lesson, positions of desks, what to learn from realia, encouraging students to weekly, monthly self- assessment and developing learner autonomy of students on encouraging students to learning process with self-discovery. While teachers of 16 to 20 years of experience are more supportive on students' participation to decisions to what to learn from audio-visual aids, teachers with 11 to 15 years of experience are much more supportive on leading them to find their own explanations to classroom tasks.

### **Suggestions**

Teachers may organize student-centered activities including responsibilities for encouraging them to develop learner autonomy. Teachers may be trained about methods and principals of learner autonomy. Teachers may develop their daily instructional plans according to learner autonomy. In further researches, teachers' opinions may be taken by using qualitative studies such as interviews.

**Keywords:** Learner autonomy, Teachers' views, Secondary school English teachers

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## **The Content Analysis of Dissertations Completed in the Field of Curriculum and Instruction (2009-2014)**

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The purpose of this research is to analyze dissertations completed in the field of Curriculum and Instruction between the dates 2009-2014 in terms of various aspects such as university, year, research topic, method, design, sample type, sample size, data collection methods, data analysis technique and compare the results with dissertations between the dates 1974-2009 (Bıkmaz et al, 2013). In addition, curriculum evaluation studies (the effectiveness of teacher education curricula, formal and informal education curricula) which are most studied in the dissertations (%22,4) were analyzed in terms of method, design, data collection tools, duration of experiment etc. It is expected that the findings of this study will guide researchers and educators in that the knowledge about frequently preferred research topics, methods, designs, data collection tools, data analysis techniques etc. in the field of Curriculum & Instruction will lead them in determining the scope and methodology of their studies.

This is a descriptive study based on qualitative research method. In order to determine the dissertations according to division included in this research, a comprehensive review was made through the thesis database of Council of Higher Education (COHE). Out of 165 dissertations, totally 121 dissertations were included in this study because 44 of them were unauthorized. In the analysis of dissertations, as a data analysis technique of qualitative method, content analysis was used. Firstly, a content analysis form was prepared consisting of categories such as university, year, research topic, method, design, sample type, sample size, data collection methods and data analysis techniques. Then, dissertations were analyzed based on this content analysis form and the findings were presented accordingly. In addition, descriptive statistics such as frequencies, percentages were also used by using SPSS-18 program.

Out of 121 dissertations; 20 (%12,1) were completed in 2009, 26 (%15,8) in 2010, 25 (%15,2) in 2011, 32 (%19,4) in 2012, 44 (%26,7) in 2013 and 18 (%10,9) were completed in 2014. The number of the dissertations completed in the universities can be aligned from the highest number to the lowest one like that: 22 (%13,3) dissertations in Fırat University, 15 (%9,1) in Abant İzzet Baysal University, 14 (%8,5) for each in Anadolu and Middle East Technical University, 13 (7,9) in İnönü University, 11 (%6,7) for each in Hacettepe and Ankara University, 10 (%6,1) in Yıldız Technical University, 9 (%5,5) in Gazi University, 7 (%4,2) for each in Necmettin Erbakan and Adnan Menderes University, 6 (%3,6) in Selçuk University, 5 (%3,0) for each in Dokuz Eylül, Ege and Mersin University, 4 (%2,4) in Çukurova University, 3 (%1,8) in Atatürk University, 2 (%1,2) for each in Balıkesir and Dicle University.

It was found that mostly preferred topics in dissertations in the field of Curriculum & Instruction between the dates 2009-2014 are teaching-learning approaches/ models/methods and techniques (%17,6), the effectiveness of formal education curricula (%13,9), teaching-learning strategies/styles and their instruction (%12,7), the effectiveness of teacher education curricula and teacher development practices (%12,7), skills and their instruction (%9,1), education and information technologies (%7,9). On the other hand, the least preferred topics are the effectiveness of informal education curricula, curriculum development studies, teaching-learning environment, special education (%1,8), environmental education and other topics (%1,2). Furthermore, it was found that out of 165 dissertations, in 37 dissertation curriculum evaluation was studied. Out of these 37 curriculum evaluation studies, 16 dissertations (%43,2) evaluated primary and secondary curricula, 2 dissertations (%5,4) evaluated high school curricula, 11 dissertations (%29,7) evaluated teacher education and teacher development curricula, 3 dissertations (%10,8) evaluated informal education curricula, and medical ethics education, English preparatory program, post-graduate curricula, vocational high school (tourism) curriculum, program evaluation standards was studied in one dissertation for each. The content of 10 dissertations out of 37 was not accessed. So, out of 27 dissertations in which curriculum evaluation was studied, only 3 dissertations used one group pre-test – post-test design, in other 24 dissertations curriculum was evaluated on the basis of target people' opinions (students, teachers, academicians, administrators etc.). In 10 dissertations, survey/scale and interview form was used for data collection; in 9 dissertations only quantitative data collection tools (survey, scale, evaluation form) were used; in 2 dissertations, survey, interview form and observation form was used for data collection; in 2 dissertations, only qualitative data collection tools (interview form, observation form, document analysis) were used. Out of 27 dissertations, in 8 dissertations curriculum evaluation models were used, in other 19 dissertations any curriculum evaluation model wasn't used.

In dissertations, mostly preferred sampling types [target sample] are teachers used in 41 dissertations (%33,9), undergraduate students (%32,2), secondary school [5-8] students (%28,9) and academicians (%18,2). In terms sample size, it was found that in descriptive studies sample size is generally "above 1000" (%35,3), in experimental studies sample size is mostly between 31-100 (%75,7) and in qualitative studies sample size is mostly under 100 (%93,7). In terms of data collection tools used in dissertations, the most used tools are scales used in 67 dissertations (%55,4), interview form (%53,7), survey (%32,2), achievement tests (%29,8) and observation form (%19,0). In terms of data analysis techniques used in dissertations, mostly preferred techniques are one variable analyses-correlational analyses-qualitative analyses together (%43,0), one variable analyses-correlational analyses together (%28,1), and qualitative analyses (%14,9).

This study has importance in terms of drawing the general framework within the current tendencies, shifts, topics, methods concerning the dissertations in the field of Curriculum & Instruction.

**Keywords:** Curriculum and instruction, content analysis, dissertations

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## **The Implementation and Evaluation Study of an Instruction Design Based on The Interdisciplinary Approach**

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Due to changes in our times, educators aim to gain students in real life related skills and subjects through a thematic approach (Armstrong, 2000). Therefore, it is found out that education systems necessitate interdisciplinary implementations; consequently a transformation towards these has gained momentum (Armstrong, 2000; Campbell and Henning, 2010; Lattuca, Voigt and Fath, 2004, Quo. in. Mansilla and Duraising, 2007; Wagner, Murphy, Holderegger and Waits, 2012). Considering this necessity, the aim of this study to evaluate implementation and evaluation of “Conscious Consumer Education” which is consumer-oriented and based upon interdisciplinary curriculum. In accordance with this purpose, the following research questions were attempted to answer.

- How does the prepared instruction design proceed in practice?
- What are the student opinions towards implementation and evaluation dimensions of the instruction design?

In this study, case study approach, which is one of the qualitative research patterns, was employed. In the case study consists of an investigation of a single environment, a single subject, single document storage or a specific event in detail (Merriam, 1988; Yin, 1989, Stake 1994, Quo. in. Bogdan and Biklen, 2007). The instruction design that was implemented in this research emphasizes the concept of conscious consumption. The general aims of instruction design are to make students aware towards factors that influence and shape consumer behaviours and habits, to question these factors with a critical perspective, to use different type of knowledge and skills in life-oriented decision making process effectively and to gain a sensitive consumer’s perspective towards environmental and social subjects. In line with these general aims, 21 learning gains were written down and in order to realize these gains course plan that made a connection between courses of mathematics, social studies, physical sciences, Turkish, visual arts and media literary were prepared.

The participants of the research consists of 30 students who study on the sixth grade of a public school determined through availability sampling method (Yıldırım and Şimşek, 2008) and one of the researchers that prepared instruction design. In collecting data, methods of observation and interview, which were not structured from qualitative research techniques, were employed.

During the first stage of data collecting process, the implementation process of the instruction design was observed for 16 course hours throughout eight weeks.. Unstructured observation (Yıldırım and Şimşek, 2008) was employed in this process while the other researcher recorded implementation process by a video camera. After observations, seven sixth grade

students were voluntarily selected for semi-structured interviews. In analysing collected data, primarily deductive analysis method was used; however the research also benefited from inductive analysis method. In this process, the NVIVO 10 software was used. The literature concerning interdisciplinary curriculum was reviewed for deductive analysis method (Meeth, 1978, Quo. in. Garkovich, 1982; Jacobs, 1989; Erickson, 1995; Yıldırım, 1996; Martinello, 2000; Özkök, 2005; Mansilla and Duraisingh, 2007; Campbell and Henning, 2010) and categories were formed. During the analysis process, in addition to these categories, new categories were taken into consideration and data were analysed.

As a result of analyses, it was observed that the researcher, who did the implementation, questioned necessary foreknowledge for interdisciplinary connections, provided information for essential disciplines and reminded necessary disciplines as well. Nonetheless, during the process concepts were focused and connections were made with the real life, students were asked for justification. The process included frequent question-answer activities. According to performance indicators of the students, it was found that they combined knowledge and skills of different disciplines, they used these knowledge and skills in problem solving and actively participated in process. Furthermore, it was identified that they used skills such as questioning, analysing, reaching original solution and employing different points of views. During the interviews with students, the participants expressed that this implementation had positively affected their academic achievement in other courses. They mentioned that this instruction design based on interdisciplinary approach helped to maintain their knowledge permanently and to contributed to combination of knowledge and skills of different disciplines.

As a result the study found out that implementer-researcher allowed for necessary implementation to combine knowledge and skills that were based on different disciplines and leaded students through different questions and explanations. Another dimension of findings was that students made connections between disciplines through necessary guidance however skills that necessitate higher level thinking were not acquired at a desired level. Although the analysis process continues, integrated evaluation of findings indicates that the implementation contributed to the development students' awareness towards conscious consumption.

**Keywords:** Conscious Consumption, Interdisciplinary Curriculum, Instruction Design

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## Examining the Emotional Literacy Skill Levels of High School Students

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Emotional Literacy was indicated as part of a project supporting humanistic education in 1970s (Lotecka, 1974). Emotional literacy (EL) refers to the ability to understand emotions, the ability to listen to others and empathise with their emotions, and the ability to express emotions effectively (Steiner, 2003; Weare, 2004; Stone, 2005). An emotionally literate person is to be able to deal with emotions in a way that advances personal power and improves social life quality (Sharp ve Herrick, 2000). EL improves relationships, creates loving possibilities between people, makes co-operative work possible, and facilitates feeling of community. Thus, emotional literacy is a social process that grounds the ability of understanding emotions (Gillum, 2010).

Emotional literacy emphasizes that the emotional health is as important as mental health (Ripley ve Simpson, 2007). One of the most important assumptions of EL is that individuals who feel positive about themselves can learn better (Faupel, Sharp ve Herrick, 1998). Thanks to emotional literacy skill which can be taught as the same as reading, writing, calculation, emotional welfare of students can be achieved. Because, EL follows a strategy to convert fear and distress into a form of energy (Antidote, 2003). Emotional literacy curriculums, which can be implemented both individually and in the school environment, are essential to develop social and emotional skills (Killick, 2006). The objectives expected to gain with emotional literacy curriculum that blends the traditional and contemporary understandings are;

- To develop and enrich the vocabulary based on emotions,
- To provide students the opportunity to recognize and understand their feelings,
- To provide students the opportunity to recognize and understand the emotions of others,
- Encourage students by enabling them to develop self-control strategies to be able to express emotions correctly,
- Provide opportunities to make friendships and to develop social skills in order to sustain interpersonal relationships (Cornwell ve Bundy, 2009).

The concept of emotional literacy incorporates many factors supporting the individuals as required by contemporary educational understanding's need to raise students who are independent, problem solvers and analytical thinkers. There need to be realistic studies which could present the individuals' skills of understanding, managing, expressing their feelings. Emotional literacy both introduces emotional awareness, empathy, motivation, self regulation and social skills (Weare, 2004) and rehabilitate the stress and violence (Barnfather ve Amod, 2012).

The aim of this study is to examine the emotional literacy skill levels of high school students and interpret these levels in terms of various variables. In order to determine the differences; variables of gender, class level, last term GPA, school type, number of siblings, mother and father's graduation degrees and monthly income of the family were used.

**Method:** In this study, survey method, which is one of the techniques of qualitative research, was used and the study was run in the central districts of Eskişehir. The population of the study was 35936 public high school students who were being taught in the central districts of Eskişehir through 2012-2013 academic year and also, stratified sampling method was used to create a sample of 1,103 high school students. Within the framework of stratified sampling, sample was created according to types of high schools. As the study model is a survey, in terms of the probability of generalization, from each school the students were decomposed randomly across class levels (9, 10, 11, 12). Out of 1500 data collection tools that were distributed for the purpose of application, 1103 tools - which were fully answered by the participants - were taken into the process of data analysis. While gathering the data, 'Emotional Literacy Skills Scale' that was developed by the researcher, was used. In the analysis process SPSS statistical analysis program was used for t-tests, One-way ANOVA and Tukey HSD multiple comparison test.

**Findings:** With the analysis of research data, most of the secondary school students studying in the central districts of Eskişehir have high and intermediate levels of emotional literacy skills. In terms of demographic variables, there found to be statistically significant differences in total emotional literacy skill points according to gender, school type, last term GPA.

**Conclusions:** The results of the study found out that majority of the students have high and intermediate levels of emotional literacy skills. The students who have high grade point average and the girls have high average scores with respect to other ones. So, the schools that have girls more than boys and also have high point degree of entrance points have better conditions about emotional literacy skills.

**Keywords:** Emotional Literacy Skills, Literacy, Emotional Intelligence, Survey, High Schools.

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# **The Effect of the Implementation of Citizenship and Democracy Education Curriculum with Creative Drama and Other Interactive Teaching Methods on Achievement and Loyalty to Democratic Values**

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The main purpose of this research is to determine students' academic achievement, their loyalty to democratic values and the reasons for achievement of the successful students, and to suggest a draft curriculum through the implementation of the Citizenship and Democracy Education Curriculum by using creative drama and other interactive teaching methods.

## **Method**

This research utilizes the “Embedded Design” that is a mixed methods research design. The participants of the quantitative part of the research are composed of 70 eight graders in a school affiliated to the Çankaya District Directorate of National Education. 30 students are involved in the experimental group, 28 students are involved in the control group 1, and 22 students are involved in the control group 2. The experimental group and the control group 1 were taught by the researcher, and the control group 2 was taught by the teacher that was teaching the citizenship and democracy education course. The participants of the qualitative part of the research are composed of all of the students in the experimental group. The quantitative data was collected through the “Primary Citizenship and Democracy Education Test” and the “Loyalty to Democratic Values Scale”. The qualitative data was constructed through the “Semi-Structured Interview Form”. The data obtained through the PCDET was analyzed using the “Two-Way Mixed Analysis of Variance (ANOVA)”, and the data obtained through the LDVS was analyzed using the “Wilcoxon Signed-Rank Test” and the “Mann-Whitney U Test”. The qualitative data was analyzed in two coding cycles. Open coding, in-vivo coding and structural coding were utilized in the first cycle coding process, and pattern coding, focused coding and axial coding were utilized in the second cycle coding process.

## **Findings**

The average PCDET pre-test score of the students in the experimental group is 21.70 while the average PCDET post-test score is 52.57. The average PCDET pre-test and post-test scores of the students in the control group 1 are 19.89 and 29.04, respectively. It is found out that there is a significant difference between the experimental group and the control group 1 based on the group factor in favour of the experimental group [(F<sub>(1,56)</sub>: 781.94, p<.05)]. The data indicates that there is a significant difference in the average PCDET pre-test and post-test scores of the student in favour of the post-test [(F<sub>(1,56)</sub>: 489.38, p<.05)]. It is found out that there is a significant joint effect of the factors of being in the experimental group and the control group 1, and of the pre-test and post-test measures on the students' achievement levels [(F<sub>(1,56)</sub>: 144.27, p<.05; *d*=2.19)]. This difference is in favour of the experimental group and the post-test.

The average pre-test score of the students in the control group 1 is 19.89 while their average post-test score is 29.04. The average pre-test score of the students in the control group 2 is 16.77 while their average post-test score is 17.64. It is found out that there is a significant difference between the control group 1 and 2 based on the group factor [(F<sub>(1,48)</sub>: 11.52, p<0.05)]. Regarding the students' achievement levels, there is a significant difference in the average pre-test and post-test scores of the students [(F<sub>(1,48)</sub>: 21.51, p<0.05)]. It is determined that there is a significant joint effect of the factors of being in the control group 1 and 2, and of the pre-test and post-test measures on the students' achievement levels [(F<sub>(1,48)</sub>: 14.72, p<0.05; *d*=1.73)]. This difference is in favour of the control group 1 and the post-test.

There is no significant difference in the total LDVS pre-test score of the students in the experimental group and the control group 1 (U= 355.50, p> 0.05). There is a significant difference between the total pre-test and post-test scores of the students in the experimental group (z= -3.749, p<0.05) whereas there is no significant difference in favour of the control group 1 (z= -.901, p> 0.05). It is found out that there is a significant difference in the LDVS post-test scores of the students in the experimental group and the control group 1 in favour of the experimental group (U= 53.500, p<0.05).

It is found out that there is no significant difference in the total pre-test scores (U= 289.500, p> 0.05), the total pre-test and post-test scores (z= .901, p> 0.05), and the total post-test scores (z= 1.218, p> 0.05) of the students in the control group 1 and 2 (U= 275.000, p>0.05).

### **Conclusions and Suggestions**

As a result of the research, it is found out that the Citizenship and Democracy Education Curriculum enriched by creative drama and interactive teaching methods is more effective than the task-based Citizenship and Democracy Education Curriculum developed by the Ministry of National Education in improving the students' achievement levels and increasing their LDVS scores.

The interviews that were conducted with the students in the experimental group are aimed at investigating the factors that positively affect the students' achievement levels. The students stated that creative drama and interactive teaching methods enabled them to learn the course content with a hands-on/minds-on experience and in an easier way, and that the animation part of the method was informative, prepared them for the real life, provided them with an enjoyable and interesting learning atmosphere and increased their participation. The students expressed that the creative drama method developed their creativity and imagination, and they could understand, comprehend and be aware of what they learned. They also stated that their self-confidence, sense of responsibility and course attitude was developed, and their willingness to learn was increased.

The PCDET scores of the students in the experimental group indicate that the students could achieve most of the course outcomes related to human rights and freedoms, democracy culture, and individual responsibilities. In the interviews the students also stated that they learned basic human rights, freedoms and responsibilities, and that they embraced democracy culture. These results demonstrate that the qualitative research data is in line with the quantitative research data.

Based on the research results, it is suggested that the curriculum developed by the Ministry of National Education is enriched by the creative drama method, and that the creative drama method is utilized in the future courses such as human rights, democracy and citizenship education that may be incorporated into the curriculum with a different course title in different education levels.

**Keywords:** Citizenship and Democracy Education Curricula (CDEC), creative drama, interactive teaching methods, curriculum evaluation, citizenship and democracy education.

# Mathematics Lesson Attainment Test

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The purpose of this study is to develop a test that can be used in measurement of the mathematics attainment. The test form was applied to 5nd grades of elementary school students of 2010-2011 academic year. In the pilot study 40-item-scale was applied to 200 elementary school students. SPSS 13 statistical software was run to analyze the received data. In the pilot study Cronbach's Alpha Coefficient of Reliability was 0.85. After test and item analysis the number of the items is reduced to 30 and the "Mathematics Attainment Test" was formed.

## 1. Introduction

People working to improve math education need to understand "What is Mathematics?" Mathematics is the science that deals with the logic of shape, quantity and arrangement. Math is all around us, in everything we do. Mathematics as an interdisciplinary language and tool. Like reading and writing, math is an important component of learning and "doing" (using one's knowledge) in each academic discipline. Mathematics is such a useful language and tool that it is considered one of the "basics" in our formal educational system. **Problem solving** is key in being able to do all other aspects of mathematics. Through problem solving, children learn that there are many different ways to solve a problem and that more than one answer is possible. It involves the ability to explore, think through an issue, and reason logically to solve routine as well as nonroutine problems. In addition to helping with mathematical thinking, this activity builds language and social skills such as working together. **It is important for children to learn** how to use estimation, when the technique is appropriate, and when the solution is reasonable.

### 1.1. Turkish Primary School Mathematics Curriculum

The changes from the old to the new mathematics curriculum are summarized in 2005 MEB curriculum. It seems that the newly developed Turkish primary mathematics curriculum adopted a mixed model while emphasizing the subject centred model in the content development and learner centred models in the pedagogies and assessment techniques. Activities are planned in a constructivist fashion while considering the individual differences in learning, and leaving room for localization of the activities (MEB, 2005).

## 2. Method

### 2.1. Research Design

Descriptive research method is used in this study. The data used in the test development process is collected from 200 elementary school students. After the pilot study 40-item experimental test is reduced and 30-item MLAT is formed.

## 2.2. Sample

The experimental test form was applied to 5nd grades of elementary school students. 200 students participated in the application. It is beneficial to work with a larger participant-group to obtain better results (cited in Büyüköztürk, 2002a, p.480).” Thus the number of the students can be accepted to be sufficient.

## 2.3. The Preparation of MLAT

In the first phase of developing MLAT, related literature is thoroughly studied. Since items were extracted from the related literature, they were checked for compatibility with the comprehension level of students. For this purpose, items were checked by a teacher from the department of Mathematics and Classroom Teachers for correctness and simplicity. Later, in order to support the validity of the test, 10 students from the subject group of 6nd grade students of DIPTE read the items aloud to simplify the terms they had difficulty to understand. In the next phase an item pool of 40 items was presented to 10 domain experts. In the light of their opinions the items were revised. The finalized test form included 30 items.

## 3. Findings and Results

### 3.1. Analysis of the Data

Cronbach’s Alpha Coefficient of Reliability is calculated to be . 85 and this value indicates that this test has a high reliability for internal coherence.

## 4. Conclusions and Recommendations

As a result of this research which aimed to develop a test that can be used for measuring the mathematics attainment that an individual brings to a learning environment; a 30-item MLAT in the is developed. Items; 1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15,16 17, 18, 19, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32, 34, 36, 37, 38, 39 are used to determine the level of individual’s mathematics attainment . In order to increase the quality of education environment, it becomes important to know the levels of mathematics attainment of the learners’. By using the test developed in this study, educators will be able to define the mathematics attainment levels of the students and take certain measures against the deficiencies. Additionally educators will be able to measure the effectiveness of the education applied or to compare the contribution of different curricula to mathematics attainment by using MLAT.

**Keywords:** mathematics, attainment, attainment test.

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# **The Development of a Scale to Determine Teachers' Opinions on The New Mathematis Curriculum**

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Global changes in the area of technology and information systems brought changes in the area of education as well. Along with these changes in the international arena, Turkish Ministry of Education also revised 6th-8th grade mathematics curriculum. Textbooks reflecting the philosophy of this curriculum were written and implemented in classrooms.

Studies on international comparisons on mathematics education indicate that the factor most affecting students' success is the curriculum used (Cai, 2003; Jackson, 1992). Reys, Lappan and Hirsch (2003) classify the curriculum in four categories: designed curriculum, curriculum reflected in the textbooks, implemented curriculum, and the assessed curriculum. For students, the reflection of the curriculum is the textbooks and textbooks indicate to what extent the designed curriculum is actually used (Remillard, 2000) and serves as a bridge in its implementation (Li, Chen, & An, 2009). For the students, other than textbooks, the education in the classroom, pedagogy and activities used in teaching are also reflections of the curriculum.

In Turkey, studies evaluating the new mathematics curriculum from teachers' perspective were conducted; however, most of the said studies were done locally with limited resources. Anılan and Sarier's (2008) research investigates sixth grade teachers' opinions in Eskişehir with regards to the sixth grade mathematics curriculum. The study sites class size, time restraints, infrastructure of schools, poor support given to teachers by parents and school administration, the differences observed between the curriculum and national exams as major obstacles to the implementation of the curriculum. Another study based on the views of sixth grade mathematics teachers from Eskişehir was that of Erdoğan and Yenilmez (2009). This study focused on the cooperative learning pedagogy used, which is endorsed by the new curriculum. Aksu's study of 2011 explored 6th-8th grade teachers' opinions regarding the new program with respect to demographics such as sex, years in service, the type of school in which they are employed etc. The sample was selected among teachers in Izmir. The study did not find a statistically significant difference regarding any of the demographics.

Another component of the new curriculum is the new textbooks. Arslan and Özpınar (2009) reviewed the characteristics good textbooks should have. They then interviewed 13 teachers and asked them to evaluate two of the textbooks being used in 6th grade, based on these criteria. The results indicate that though the teachers find some of the desired characteristics in these textbooks, the attention given to students' prior knowledge, the connection made between chapters, the use of technology being limited to calculators, and most questions being on the application level were cited as their shortcomings.

Though the new mathematics curriculum has been implemented, a scale evaluating the teachers' perception of the new curriculum, pedagogy used in class, skills developed in students through the new curriculum, students' attitude towards mathematics due to the new curriculum, and the contribution of textbooks to students' learning has not been found in the literature. The aim of this study is to create such a scale that eliminates these said discrepancies and thus contribute significantly to the literature in the field.

Following the literature survey a 72 item initial scale was prepared. This initial scale was reviewed for its validity by five instructors in the school of education, three of whom belonged to the department of mathematics education and two of whom belonged to department of measurement and evaluation. A pilot study was done with 6th-8th grade mathematics teachers from Afyon, Ankara, Aydın, Çorum, Denizli, Düzce, Kırıkkale, Van, Şırnak. Then the scale was given to 6th-8<sup>th</sup> grade mathematics teachers working in public and private schools in Istanbul. Istanbul was chosen because due to its cosmopolitan nature it is representative of Turkey. These schools were randomly selected yet the ratio of public/private schools as well as schools in rural areas, boroughs, and in the inner-city reflected the percentages of such schools in Istanbul.

After the survey forms were analyzed, it was found that 1346 of them could be used for the study. The factor analyses revealed that the scale consist of 5 factors, namely the overall evaluation of the new curriculum, pedagogy used in class, skills developed in students through the new curriculum, students' attitudes towards mathematics, and the contribution of textbooks to students' learning. The Cronbach alpha was found to be 0.938. Thus, the scale is thought to be valid and reliable.

**Keywords:** Mathematics curriculum, middle school, teacher opinions

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# Evaluating 2<sup>nd</sup> Grade English Language Teaching Program under the Light of English Language Teachers Opinions

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Language is the most important device of communication among the people. Communities on the world have the common languages that provide their interactions with each other. However, with the development of international relations, peoples not only need to interact with each other but also need to interact with other nations (Demirel, 2012: 2-3).

Today everybody know the importance of learning foreign language so there is a increasing need for learning and teaching foreign languages all over the world (Bağçeci, 2004). English as a foreign language is seen as a global communication language and this increases the other nations' demand of learning English. As a result of this nations all over the world begin to develop policy of teaching and learning English (McKay, 2010: 28).

In Turkey, in the teaching and learning year of 2012-2013 4+4+4 education reform has been come into force. This educational reform provide primary school students to begin their primary education at the age of 5 and learn foreign language at the age of 6 (Bayyurt, 2013: 98). So in this study, it is aimed to evaluate 2<sup>nd</sup> grade English Language Teaching Program which has been begun to be implemented in the teaching and learning year of 2013 / 2014 with the recent education reform, under the light of primary school English language teachers' opinions.

## Method

In this study survey method has been adopted as it is aimed to reach a general judgement with the help of data obtained from a group (Karasar, 2012).

The study group of the study consists of 144 primary school English language teachers working in primary schools in Diyarbakır and especially teaching English to the 2<sup>nd</sup> grade primary school students. Within the research it is tried to reach all of the teachers in study group but 141 English language teachers can be reached.

The required data for the study is collected via “*The Scale of Evaluating 2<sup>nd</sup> grade English Language Teaching Program in terms of English Language Teachers Views*” developed with the aim of determining 2<sup>nd</sup> grade primary school English language teachers opinions about the 2<sup>nd</sup> grade English language teaching program. The gathered data has been analyzed with the help of SPSS package program. In order to analyse data mean, standard deviation and frequencies have been calculated and results have been interpreted.

## Findings and Results

The results of the analysis have showed that while most of the English Language Teachers have taken the subject of “Teaching English to Young Learners” in their undergraduate training process and think that 2<sup>nd</sup> grade primary school students get used to studying with their English teachers, most of the English Language Teachers does not find the 2<sup>nd</sup> grade English lesson hours adequate and do not have the required teaching and learning environment and materials for teaching English to young learners. Moreover, English Language Teachers are determined to be “Neutral” about the general features, the goals and objectives, the content, the teaching and learning process and evaluation and assessment process of the program.

## Suggestions

- Curriculum and Instruction studies of Ministry of Education should include data obtained from scientific researches and universities and opinion of teachers who implement the program.
- By cooperating with universities Ministry of Education should provide to English language teachers seminars and workshops on the topic of Teaching English to Young Learners.
- Because of time consuming learning activities and insufficient lesson hours, weekly lesson hours of English should be increased or teachers should be encouraged to make additional activities to provide long lasting learnings.
- By keeping the importance of visual and audial devices into account, all primary schools should be equipped with the required technology and language learning environment. So all primary schools should be equipped with at least CD, CD driver and projection which is suggested to be used in the program.
- By understanding the nature of teaching to young learners, school administrators should provide to teachers required understanding, technological background and equipments.
- In order to increase their personal and professional developments teachers should pursue the foreign language teaching process of other countries and the findings of scientific researches and essays.
- English language teachers should examine and analyse teaching program of the English deeply. Additionally, they should share their experiences at the seminars conducted at the end of the terms.
- With the aim of supporting the findings of the study, 2nd grade English language teaching program should be examined from the perspectives of different study group selected from different region by different researchers.

**Keywords:** Curriculum evaluation, English language teaching program, Teaching foreign language to young learners.

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# Students' Perception of Quality of Instruction in Case Based Learning

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Case based learning (CBL) is a learning method that develops students' problem solving and decision making skills through working on real life situations (Smith, 1987, s: 51). Research on CBL demonstrate that using real life cases through CBL process increases students' interests and desires to learn (Cornely, 1998; Jalgaonkar, Sarkate ve Tripathi, 2012), enhances students' engagement (Herreid, 2005; Brooke, 2006; Lee ve Choi, 2008), provides opportunity to combine theory and practice while working on cases (Shulman, 1992; Lee, Lee, Liu, Bonk ve Magjuka, 2009), facilitates student's learning (Curran, Sharpe, Forristall, ve Flynn, 2008; Jhaveri, Chawla ve Shah, 2012), and prepares students for the vocation by enhancing their experiences (Stjernquist ve Crang-Svalenius, 2007; Ciraj, Vinod ve Ramnarayan, 2010; Nelson, 2010).

## **Purpose**

This study aims to investigate students' perception of quality of instruction in case based learning. After developing and implementing a case based curriculum for Police Vocational Law I course, students' were asked to express their opinion about quality of instruction.

## **Method**

### **Research Design**

Using a quasi-experimental design, this study conducted with two experimental group in which case based curriculum were implemented. After implementation of curriculum, students' perception of quality of instruction was assessed by semi- structured interviews.

### **Participants**

Thirty senior students who registered for the Police Vocational Law I course were interviewed. Students were from two different classes in which the same curriculum was implemented by the same instructor. Sixteen students from class 1, fourteen students from class 2 were participated in this study.

### **Data Collection Tools**

Semi structured interviews were conducted to gather students' perceptions of quality of instruction in case based learning. Students had reservation on tape-recording conversations. Instead, take note method was used to record their opinions. In addition, two researchers were present to manage sessions effectively and take notes in all interviews.

## Data Analyzing Techniques

The data which was derived by student interviews were analyzed descriptively. Responses were reviewed by the researcher of the present study and two curriculum specialist working independently to identify codes under recurrent theme. Under quality of instruction theme eleven codes were identified and were used as categories for coding the responses (Table 1).

Table 1: Frequency of Students' Responses on Quality of Instruction in Case Based Learning

<i>THEME</i>	<i>CODES</i>	<i>Class 1 (n:16)</i>		<i>Class 2 (n:14)</i>	
		<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
<b>Quality of Instruction</b>	Gaining attention	12	75	11	78
	Awakening curiosity	13	81	12	85
	Attracting interest	16	100	14	100
	Facilitating learning	12	75	13	93
	Permanency of knowledge	12	75	14	100
	Increase student participation	15	93	14	100
	Combine theory and practice	13	81	11	78
	Leading research	4	25	6	43
	Making connection with real life	14	88	10	71
	Recognition of deficiencies	8	50	7	50
	Preparation for the profession	16	100	14	100

## Findings

The interview data derived from students indicate that CBL interacts with the real life and this enhances students' interests and curiosity on course subjects, facilitates learning, concretizes knowledge consistently, increased students' involvement, provides opportunity to combine both theory and practice, lead students research by making them aware of their deficiencies, and finally prepares them for the profession.

## Conclusions

The findings of the study indicate that CBL significantly contribute to the learning quality of instruction by supporting student learning positively based on students' perceptions.

## Suggestions

Students designated that CBL activities provided opportunity to implement what they have already learned as content and this enabled them to feel prepared for their profession effectively. Students also indicated that they tend to be more interested in the content which is related to the real life situations. Therefore, curriculum developers and trainers should focus more on creating opportunities for students which enable practice real life cases.

**Keywords:** Case based learning, case based curriculum, quality of instruction

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# The Effect of Creative Drama on Academic Success: A Meta-analytic and Thematic Analysis

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This study aimed to determine the effect of creative drama on achievement through the use of qualitative and quantitative research methods. In the quantitative section of the research, the meta-analytic method was used. Within this context, the researchers attempted to include all studies of creative drama carried out between 2000 and 2014 at national and international levels. As a result of the literature review, 40 studies (8 articles, 28 MA theses and 4 PhD theses), complying with the inclusion criteria which are examining the effect of creative drama on academic success and including statistical values to calculate the effect size, were selected out of 720 thesis and 440 articles searched for within the ProQuest Dissertations and Theses (PQDT), the Higher Education Council National Thesis and Dissertation Centre, Google Scholar, Ebscohost-Eric, Web of Science and ScienceDirect search engines. The characteristics of the study were determined as grade levels of education, subject field and the implementation period. Data analysis of the meta-analytic study was carried out taking into account the treatment effect method. The Comprehensive Meta-Analysis (CMA) statistical program and the MetaWin program were used in the effect size calculation. The Random Effects Models (REM) and the value of effect size classified by Cohen (1992) were made use of for the meta-analysis process. The inter-rater reliability was calculated in order to prove the reliability of the outcome (Miles & Huberman, 1994) and was found to be 100%.

In the qualitative context of the study, data collected through documentary review based on the content analysis of the thematic examination of the articles and theses concerned with creative drama, was analysed through the Maxqda program. The validity of the qualitative section of the study was ensured by creating the integrity of the consistency and meaningfulness amongst the themes and codes. In terms of the reliability of the data analysis process, a Cohen Kappa value was calculated to find agreement amongst data coders.

The findings of the study were assessed separately in qualitative and quantitative dimensions. According to quantitative findings, following the analysis of academic success scores from 40 studies in respect of REM, the overall weighted effect size was seen to be +1.68. Thus it can be stated that creative drama has a large effect on achievement. The  $Q$  value indicated that the distribution of effect sizes in this collection of studies is heterogeneous ( $Q= 60.78$ ,  $df= 39$ ,  $p<0.01$ ). In other words, the variance of study effect sizes is larger than can be explained by simple sampling error. Thus, a random effects model was used (Borenstein, Hedges, Higgins, & Rothstein, 2009). In order to explain this variance, studies were categorized into groups in terms of grade level, subject area and implementation period (IP) and the analyses were undertaken. With regard to *grade level*, the studies were divided into five categories: pre-school ( $N=2$ ), primary ( $N=10$ ), secondary ( $N=24$ ), high school ( $N=2$ ) and university ( $N=2$ ). A significant between-group effect ( $Q_B= 3.75$ ,  $df= 4$ ,  $p>0.05$ ) was not found. This result

indicates that academic success scores do not change depending upon grade levels in terms of lessons based on the creative drama. When the effect of the technique was analysed in terms of the students' academic success in relation to grade level, the largest effect size was in university student group ( $ES=2.54$ ) while the lowest one was in the case of high school students ( $ES=1.39$ ). In terms of subject fields, studies were divided into four categories - Science ( $N=8$ ), Math ( $N=5$ ), Social Sciences ( $N=23$ ) and Foreign Languages ( $N=2$ ). The effect size for English lessons ( $ES= +3.37$ ) was higher than for the other subject areas (Social Sciences  $ES = 1.60$ ; Science  $ES = 1.79$ ; Math  $ES = 1.00$ ), but the difference was not statistically significant ( $p>0.05$ ). This result suggests that effect sizes do not change depending upon subject field. Moreover, with regard to IP, studies were categorized into five different groups (2-4, 5-6, 7-8, 9-18 weeks and non-specified IP). As far as the IP effect of creative drama on academic success was concerned, the lowest effect size of 1.23 in the case of non-specified IP, while the highest effect size of 1.45 in the 2-4 and 5-6 week periods. However, a statistically significant difference in terms of the between-group effect ( $Q_B= 7.63$ ,  $df= 4$ ,  $p>0.05$ ) was not found. This finding showed that effect sizes do not change according to the implementation period. Meanwhile, the value of fail-safe N ( $N_{FS}$ ) regarding the effect of creative drama on academic success was calculated as being 13.796.

The evaluation of the quantitative findings of the study indicated that teachers' views were presented as the following themes: social interaction, the verbal-linguistic dimension, emotional and cognitive aspects, thinking and creativity, learning processes, benefiting from critical thinking processes, while the negative aspects of creative drama and the codes related to these themes were given under the related themes. In this context, it appeared that creative drama increases social sharing and collaboration by supporting verbal expression and fluency and encourages creative thinking by contributing to cognitive and affective aspects. However the negative aspects of this technique were understood to be caused mostly by inappropriate physical conditions such as crowded classrooms and unsuitable classroom environments. When all the related results are considered, it can be deduced that the effect size of creative drama on academic success is large, meaningful and positive. Thus, the use of creative drama technique in different grades and courses can be suggested.

**Keywords:** creative drama, meta-analysis, thematic analysis, effect size.

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# **Relationships among Elementary Students' Metacognitive Skills and Motivation toward Science Learning**

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The most important feature of a successful education includes students' awareness about the ways through which students learn, remember, think and motivate themselves (Weinstein and Mayer, 1983). The types of individuals that our society need today are composed of conscious persons who can control their own learning process and experiences. For this purpose, a constructivist approach to education has been adopted as the base for our education system. The goals of "constructivist education system" are to raise people who are capable of generating new information from old information and aware of their own learning methods, and lastly who know the value of knowledge and use it accordingly (Erdem and Demirel, 2002). The learners can organize and keep control of their learnings in an effective way when these experiences are built by persons that can control what they have learned and are aware of their own cognitive processes (Boyacı, 2010; Doğan, 2013). That learners are aware of their cognitive processes and can increase their success by acting systematically in this process has increased the number of studies on "metacognition" in recent years. There are many studies in western countries which were carried out to examine the relationship between metacognitive knowledge, its regulations and demographic characteristics, cognitive skills (Aleven, Koedinger, 2002; Veenman, Spaans, 2005). It was seen that the studies generally gave more emphasis to cognitive domain and less emphasis to affective domain (Yaman and Dede, 2007). Some studies show that the girls' motivation toward science learning was higher than boys' and students' who have higher level motivation have got higher science academic achievement. As grade level increases, motivation toward science learning decreases (İnel-Ekici, Kaya, Mutlu, 2014). The purpose of this study is to examine students' metacognitive skills and their motivation for learning science. The other purpose of this study is to investigate the relationship between metacognitive skills and their motivation for learning science. In addition, the study aims at analyzing students' metacognitive skills and their motivation for learning science in terms of their gender, grade level and academic achievement in science lesson.

## **Method:**

This study is one of quantitative research designs, correlational study along with "purposeful sampling method". A total of 302 students from 5th and 8th grades in 5 schools in Kale, a district of Denizli, were included in the sample. 167 students from 5th grades and 135 students from 8th grades participated in the study voluntarily. The reasons to include only 5th and 8th grade students in the sample are that they represent the first and last grades of the secondary school in Turkish 4+4+4 mandatory education system. Developed by Sperling et al. (2002) to determine students' metacognition and then adapted into Turkish by Topçu and Yılmaz- Tüzün(2007), Junior Metacognition Awareness Inventory (Jr.MAI) was used in this study. This scale was used to measure both dimensions of knowledge of cognition and

regulation of cognition. Students' Motivation Toward Science Learning (SMTSL), developed by Tuan, Chin and Shieh (2005) and adapted into Turkish by Yılmaz and Huyugüzel- Çavaş (2007) was used to determine students' motivation towards science learning. The dimensions of the scale include: self-efficacy, active learning strategies, learning environment stimulation, performance goal, achievement goal and science learning value. Each dimension's reliability coefficient alpha ( $\alpha$ ) changes between .5 and .8. The data were collected in the first semester of 2014-2015 academic year. The instrument application and data collection was done by researchers and teachers in the schools. Students were informed about the purpose of the study before the distribution of instrument. Students were told not to write their names on the survey forms and their oral consent was taken.

### **Findings and Results**

There is a negative correlation between metacognitive skills and their motivation for learning science. Multiple linear regression was conducted to predict metacognitive awareness in terms of motivation to learning science dimensions. The result of the present study revealed that boys' motivation level was higher than girls'. There is no significant difference between motivation levels and both grade level and gender. However, there is a significant difference between motivation levels and science achievement. There is no significant difference between metacognitive skills and both grade level and gender. On the other hand, there is a significant difference between metacognitive skills and science achievement. Students' academic achievement could be developed by increasing students metacognitive skills and motivation.

**Keywords:** Metacognition, motivation, academic achievement in science lesson, gender, grade level.

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## A Portfolio Study with The Students of Medical Documentation and Secretariat

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**Purpose:** Portfolios are not new, but their use in medicine is still in its infancy. A professional development portfolio is a collection of material, that records, and reflects on, key events and processes in that professional's career (Hall, 1992, p. 81). It is usually paper based, but it may also include anything that provides appropriate evidence of learning and achievement, such as video, audio recordings or photographs (Challis, 1999). It is a special form which monitors the student's own development and also makes students work visible (Roberts et al, 2002). Portfolio is used within this course in order to make visible the students practice at the hospital.

There are many benefits that arise from the use of portfolio-based learning:

- It recognizes and encourages the autonomous and reflective learning;
- It is based in the real experience of the learner, and so enables the consolidation of the connection between theory and practice;
- It allows a range of learning styles to be used according to the preferences of the learner;
- It enables assessment within a framework of transparent and declared criteria and learning objectives;
- It provides a process for both formative and summative assessment, based on either personally derived or externally governed learning objectives;
- It provides a model for lifelong learning and continuing Professional development (Challis, 1999).

This article describes the portfolio, which presents a record of practical work carried out in the hospital in 2014-2015 academic year for the course Medical Documentation III.

**Method:** All 18 students who attend the course participated in the study. The responsible instructor explained the benefits of the portfolio to the students at the beginning of the course. Portfolios are securely stored in the instructor's room. The instructor gave information about the documents to be included in their portfolios, and their responsibilities.

The first page of portfolio contains the student's demographic variables, giving the learner's name, year of training and supervising clinician. Included in the portfolio content were records of the student's activities during the period of the course, which were signed by the supervisor. A list of the learning objectives whose achievement the evidence in the portfolio claims to demonstrate; a short reflective overview, summarizing the learning, and indicating which items of evidence relate to which learning objective the evidence itself (Friedman et al, 2001). Students evaluated through the oral examination by the instructors at the end of the course. The students' views were obtained using the course overall evaluation form.

Findings: Students wrote a report on each week's activities, which were included in the portfolio. Students submitted their reports regularly to the faculty, and received verbal feedback on the reports. They took the responsibility for portfolio's creation, maintenance and appropriateness for purpose. There are some aspects that are recorded in the portfolio like what has happened, what has been done, seen, written, made etc., an identification of where it would be appropriate to go next and an educational action plan identifying ways in which learning needs might be met.

Students stated that they found the experience of tutorials to be educational. The students' satisfaction from the course was high.

The assessment of the contents of the portfolio was the first stage of the course evaluation at the end of the period. The second stage was the oral examination, which was carried out by the course instructors. Oral examination lasted 15 minutes average for each student. The average of the student oral exam is 83.89 points (min: 60- max:100).

**Conclusion :** Students' achievements can be assessed by portfolio under this system.

Suggestion: Faculty could use the portfolio as an assessment and measurement method in practice.

**Keywords:** Measurement and Assessment, Portfolio, Alternative Assessment Methods

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## **THEME 3: Early Intervention**

# The Effect of Education on Health: Evidence from Turkey

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In the last decade, the relationship between education and health has become a key topic. In past studies, the effects of compulsory schooling laws on mortality and health outcomes have been covered in detail for developed countries. Most of the time, social scientists show that there is strong, positive relationship between education and health in developed countries either using twins, variations in education policy or family background, and labor market conditions. Our study is the only recognized attempt to uncover the relationship between education and health in Turkey.

To cope with the causality problem, a two-stage least-squares method (TSLS) is generally utilized in the empirical analysis. Using TSLS, our study does not just measure the effects of education on health, but it also determines the direction of causality. The results of this study depend on changes in the compulsory schooling policy made by Turkish government in 1997. Making use of the change in this law, we attempt to uncover the relationship between education and health. The results of the analysis show that education may positively affect health status.

Changes in compulsory schooling laws are a useful metric in uncovering the relationship between education and health. In 1997, for example, the years of compulsory schooling increased from five years to eight years in Turkey. Therefore, for children who were older than six years old in 1997 the years of compulsory schooling remained at five years; however, for children who were younger than seven years old in 1997 the years of compulsory schooling increased to eight years. We use this variation in the years of compulsory schooling across different birth cohorts to measure the causal impact of the policy change on health.

The Turkish Statistical Institute's (TUIK) Income and Living Conditions Survey (ILCS) from 2011 is used in this study. ILCS is a nationally representative dataset that includes approximately 12,800 individuals.

The dependent variable used in this study is self-rated health is measured by utilizing a five-level Likert scale on the ILCS questionnaire. Responses to the health-related questions take discrete values from 1 to 5, where 1 represents very good health, and 5 indicates very bad health. The variable related to having a chronic disease is bivariate; for example, a 1 is added if the respondent has a chronic disease at the time of the survey, while it is 0 otherwise.

To estimate the casual effect of education on health, we followed a TSLS approach as in previous studies:

$$H_i = \beta_1 + \beta_2 S_i + \beta_3 A + \varepsilon \quad (1)$$

$$S_i = \alpha_1 + \alpha_2 \text{Reform}_{1997} + \gamma \quad (2)$$

where  $H_i$  is health value (self-reported good health, self-reported bad health, or having a chronic disease),  $S_i$  is number of years of schooling, vector  $A$  includes control variables such as the individual's age, male dummy, and marriage dummy, and  $Reform_{1997}$  is a dummy variable that is equal to 1 if individual was younger than 7 in 1997. The use of TSLS makes it easy to discover the direction of causality compared to a conventional OLS model.

In the case of self-reported good health, the estimates of both OLS and TSLS give identical results: 0.02 [SE: 0.00]. This suggests that education leads to better health within both OLS and TSLS approaches; however, the null hypothesis of no endogeneity in an OLS approach is strongly rejected by means of the Hausman Exogeneity Test and this fact casts doubt on the OLS result. The TSLS result is especially important for two reasons: (1) the TSLS methodology prevents the problem of endogeneity compared to the OLS approach, and (2) the TSLS methodology clarifies the direction of causality. Based on the results of the TSLS approach, the causality runs from education to health for the case of self-reported good health.

When we use the self-reported bad health that is a dummy equal to 1 if self-reported health is either a 4 or 5, we have estimates of both OLS and TSLS that are -0.01 [SE: 0.00]. Again this suggests that education prevents having a bad health status. Similar to the case of self-reported good health, the exogeneity problem exists within the OLS approach. The direction of causality runs also from education to health for the case of self-reported bad health.

In addition, if we use the incidence of a chronic disease dummy, there is a stronger effect on TSLS than OLS: -0.03 [SE: 0.00] and -0.01 [SE: 0.00], respectively. The effect of education on chronic disease is similar to the case of self-reported bad health. In performing Hausman exogeneity test, however, we clearly determine that the endogeneity problem exists strongly in the OLS approach for the case of chronic disease. Thus, it is more appropriate to stick to the TSLS results in Table 2. Taking TSLS results into consideration, the increase of the education coefficient illustrates that people with a higher level of education are more careful and sensitive to health issues while making lifestyle decisions.

Even though the positive relationship between education and health is well-established for developed countries, there are few studies for developing countries. This study is the first attempt to calculate the effect of education on health in Turkey.

We used both OLS and TSLS approaches for three different cases to investigate the effects of education on health. For the case of self-reported good health, OLS and TSLS results show a positive relationship between good health and education. Moreover, OLS results suffer from an endogeneity problem, while TSLS results point out that causality runs from education to health. The results for the case of self-reported bad health are in the same direction as the case of self-reported good health (i.e., there is a negative relationship between education and bad health with causality running from education to health). The results of our study strongly support the claim that more education helps individuals to have better health. In the case of chronic disease, there is a stronger effect of education on health, as education is one of the primary factors that shape individual lifestyle choices.

**Keywords:** health, change in compulsory schooling, Turkey

# **Effect of Negotiation (Problem Solving) and Mediation Education on Interpersonal Problem Solving Skills of Adolescents and Their Levels of Anger**

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The cultural backgrounds, biological, mental and affective development levels, perception, comprehension and understanding skills, values, requirements, beliefs, attitudes, preferences and personality properties of tens or sometimes hundreds of students who obligatorily share the same environment, can naturally cause interpersonal conflicts and disagreements in human relationships. As fulfilling the demands and requirements of such quantity of students at the same time and at the same environment is very difficult, interpersonal conflicts and disagreements are naturally faced in class and school environment. (Türnüklü, 2007). The past life experiences of individuals cause them to solve their conflicts in a constructive and peaceful way or in a destructive and aggressive way. In the education, by using the mediation system which is one of the most popularly applied models related with solving interpersonal conflicts, conflicts can be solved constructively and peacefully. In this context, the aim of the research is to determine whether negotiation (problem solving) and mediation education affect the interpersonal problem solving skills and anger levels of adolescents or not.

**Method:** In this research, pretest-posttest trial pattern with control group among the trial models was used. The subjects of the research were selected among students having education in three boarding Quran courses bound to Presidency of Religious Affairs in 2013-2014 academic year by sociometric survey. In the selection of trial group a form with the question of “Who are your 3 classmates that you trust and you asked for assistance in order to peacefully and constructively manage a conflict or disagreement you had with any of your classmates?” written on it, was distributed to the students and 14 students who took the highest grades from their answers were selected for the experiment group. 14 students in the control group were selected so that the standard deviation from the pretest averages of the experiment group students would be maximum 1.50 ( $S_s \pm 1,50$ ) The application study of the research was performed in the second half of 2013-2014 academic year. In the scope of the study, negotiation (problem solving) and mediation education was applied for 8 weeks and for 4 lesson hours per week to students in experiment group. On the other hand, no education was given to students in control group.

## **Data Collection Tools**

Interpersonal Problem Solving Inventory (IPSI): The inventory is a tool developed by Çam and Tümkaya (2007) in order to measure the problem solving approaches and skills of university students aged between 18 and 30. Validity and reliability studies were performed for high school students. (Çam & Tümkaya, 2008). The measurement tool totally consists of 5 sub scales (negative approach to the problem, constructive problem solving, diffidence, inability to take responsibility and persistent – tenacious approach). The obtained internal

consistency coefficient values related with each sub scale are: POY=.89, YPÇ=.87, KG=.67, SA=.68 and I-SY=.70.

Trait and Anger Style Scale (CFFSS): The scale, original name of which is “Trait Anger and Anger Expression Scale” was adopted to Turkish by Özer (1994). The scale which consists of 34 articles and assessed by quartet likert technique has three sub scales (trait anger, anger -in, anger-out and anger control) All articles in CFFSS are smooth. Individuals can get a grade between 10 and 40 from continuous anger sub scale. In various measurements made among university, high school, nursery vocational school students, managers, neurotic groups and hypertension patients, it was observed that the alpha values of trait anger scale were  $\alpha$ : .67 to  $\alpha$ : .92; of anger control  $\alpha$ : .80 to  $\alpha$ : .90; of extrinsic anger  $\alpha$ : .69 to  $\alpha$ : .91 and of intrinsic anger  $\alpha$ : .58 to  $\alpha$ : .76. These values are within the acceptable limits and generally are consistent with the data published about the original scales.

**Analysis of Data:** Posttest and pretest grade differences of subjects were taken and the binary comparisons of the groups in the series consisting of grade differences were analyzed by Mann Whitney U test. (Büyüköztürk, 2012).

**Findings:** Research findings shows that the negotiation (problem solving) and mediation education was on behalf of experiment group at significant level related with constructive problem solving (U: 47.500  $p < .05$ ), persistent – tenacious approach (U: 44.000  $p < .05$ ), anger control (U: 48.000  $p < .05$ ), but on the other hand it was determined that trait anger (U: 68.500  $p > .05$ ) grades were not on behalf of the experiment group.

**Conclusions:** Understanding the nature of interpersonal conflicts, communication skills, anger management skills and interpersonal conflict solution skills which are found within the content of negotiation (problem solving) and mediation education program contribute to the creation of a peaceful education environment. It is considered that the content of the education will contribute to the constructive solving of conflicts by the students depending on win-win principle. Research finding emphasizes the importance of “mediation education programs” to be conducted by guides and psychological consultants working in this field, depending on the developmental and preventive guidance and psychological consultancy approach principle. In this research, “negotiation (problem solving) and peer mediation education program” covered a portion of students. The education program should be extended so as to cover all students.

**Keywords:** Negotiation (problem solving) and mediation education, interpersonal problem solving, anger level

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# Examining the Interaction Between a Child with Hearing Loss and his Mother

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It is well known that early identification, fitting of hearing aids/cochlear implant and then early education are crucial in acquisition and development spoken language for children with hearing loss. The interaction which takes place between the adult and child has a critical role in language learning during the first two years of life. Several studies have shown that the presence of a hearing loss in early years of childhood had negative effects on mother-child interaction (Gallaway & Richards, 1994; Tüfekçioğlu, 2003) and deteriorate language development. The studies conducted on the mother-child interaction indicated that mothers whose child is has a hearing loss were dominant in interaction (Wedell-Monning & Lumley, 1980), using less complex sentences, fewer interrogatives, directing more imperatives, less expanding the children's utterances (Nienhuys, Gross & Horsborough, 1984) and more rejective (Tüfekçioğlu, 2003) than mothers with normal hearing child. Therefore contents of early intervention programs concentrate on mother-child interaction to support the language development of the child with hearing loss; so that mother's communicative behaviours can be normalised and then mothers learn to use the strategies and techniques that support language development in daily life (Mahoney & Wheeden, 1997). Through the active participation of mothers in early intervention practices the language development of the children would be accelareted and nourished. The practices which concentrates on parents and provides support to their skills rather than teaching directly to children are called family centered approaches.

## **Purpose**

The following study aimed to examine the interaction between a child with a profound hearing loss and his mother in the context of a family centered practice.

## **Method**

The study was designed as an action research. The participants were an 18 months old child with profound sensorineural hearing loss and his mother. Data were collected by the first author with the video recordings of mother-child interaction in the context of family education on average twice a month, audio recordings of interviews with the mother and reflective journals of the first author. Each video session was transcribed in general and micro-analysis was applied for 6 sessions in which interactive mother child play for 10 minutes once a month. Transcription of the video and audio recordings were coded by descriptive indexes and themes were established.

The data collected and analyzed by the first author were revised by other writers to ensure validity and reliability. The revision meetings were held twice in a week and audio recorded. Those recordings were also transcribed and summarized to obtain reliability of the whole process and to use as a check list to control if the suggestions toward the intervention sessions and the research process were successfully practiced.

### **Findings**

The findings indicated that the mother was controlling the play, not following interest of the child, not asking any question, not allowing time to the child to express himself and was often directing the child and using imperatives while interacting in the earlier video recordings. Eventually it was observed that those behaviors of mother reduced and the mother started to give more opportunities to child to play, follow interest of the child better and begin to ask questions. However, there were still many imperatives; joint references were frequently interrupted and although reduced; mother kept directing the play during interaction.

### **Results and Discussion**

The findings of this study which examined the interaction between child with hearing loss and his mother were consistent with the results of previous studies. The mother was found to be directive, used imperatives frequently and had more difficulty to provide joint reference while interacting with her child. The profound hearing loss of the child was considered as an important factor influencing mother's behavior. Cochlear implant surgery had been previously planned but due to the health problems it was postponed so the child's responses to sounds even with hearing aids were very limited. Therefore, it is argued that the mother behaved more physically directive and used limited language to convey what she wanted to tell to the child. Studies support this view (Nienhuys, et al., 1984). By the time this paper was written the child had undergone a cochlear implant surgery. The data collection will continue after the fitting of implant. It is expected that after the implantation his responses to sounds and mother's communicative behavior will improve in parallel.

The analysis of the data also indicated that the teacher guided the mother about the interaction by observing their play and by offering games in order to provide appropriate language input to the child during the intervention sessions.

**Keywords:** Early intervention, parent guidance, mother-child interaction, children with hearing loss.

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# Teaching of Italic Handwriting to a 4<sup>th</sup> Grade Student with Dysgraphia (An Action Research)

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Writing is one of the most effective and fundamental tools that people use to communicate. The invention of writing has brought a significant communication tool for human being besides speaking (Coskun, 2007). According to Koc and Muftuoglu (1998) writing is one of the four basic skills and crucial function of language and it is also a way of expressing himself such as speaking.

Since the end of the twentieth century, teaching beautiful and efficient writing to students has been considered one of the important issues. Because these skills, learned in childhood, affects an individual's entire life. (Coskun, 2007, p. 50). Akyol (2011a) states that teachers should ensure the formation of the habit of writing to students which mean the basic requirement to read and write fluently.

“Researches show that 34% to 10% of students have not got handwriting proficiency necessary for school work. Marr and Cermak define these children as ‘handwriting is poor’ or ‘dysgraphia’ whose handwriting proficiency underdeveloped” (cited in Yıldız, 2013). Common learning disabilities about dysgraphia are faulty, trapezoid, and hard-to-read handwriting (Akyol, 2011b). “The students who have writing difficulties generally have not been well organized, give very little ideas to interpret nature of it” (Akyol, 2011a, p. 53).

In our country, it can be said that the number of studies which are carried out for the elimination of writing difficulties is limited. The purpose of this study is teaching italic handwriting and improving the legibility of handwriting to a 4<sup>th</sup> grade student who has difficulty in writing. This study is important because it contributes to overcome the lack of writing difficulties.

## **Method:**

A qualitative research method named “action research” was used in this study. The aim of the action research is to solve the immediate and pressing day-to-day problems of practitioners (McKernan, 1996). Mills (as cited in Yıldız, 2013) refers action research can be handled in two groups as practical and participatory. This study is "practical action research", because it involves the process of finding solutions to the problems experienced by a student in writing.

That is why, a student was chosen who has normal sight and hearing and normal mental abilities but her writing skills are inefficiency. The student who participates in this study attends to a public school in Ankara. In this study, Mine, code name, is used for the student. The study was carried out in a multi-purpose classroom in the school.

Data collection tools in the study are copying and dictating texts, worksheets, homework, Scale for the Assessment of Text Readability, the research diary was used as well as conducted interviews. In the analysis of data; copying and dictating text was evaluated by the Scale for the Assessment of Text Readability.

Before this study, the student’s writing errors were detected, and an action plan is prepared for the elimination of errors. An individual study with the student is conducted with the duration of 21 course hours for 7 weeks. In order to determine the legibility of the development of

student writing copy and dictation practice were made before and after the application. Legibility of writing level is determined by the Scale for the Assessment of Text Readability.

### **Findings:**

When copying and dictation texts were examined prior to the application, these seemed to be inadequate in terms of shape, size, spacing, pitch, line tracking and visibility.

When copying and dictation text were examined after to the application it is observed that it is adequate in terms of shape, size, spacing, pitch, line tracking and visibility.

### **Conclusions:**

When the writing of students examined in terms of error detection and final writing practice it is observed that there is a remarkable progress on student. Students' willingness to the course eager to learn and doing their homework carefully are the elements which make the study productive.

As a result of the work, the student's errors declined from 25 to 2, and her writing ability reached an acceptable level in terms of readability. This study shows that elimination of writing difficulties are quite effective when the appropriate methods and techniques are used, especially by working one-to-one work with students who have writing problems and writing difficulties and it is observed that it is possible for the students gain writing skills as level of the class.

### **Suggestions:**

When the literature examined it can be said that the studies related to writing difficulties are quantitatively inadequate in Turkey. Therefore, it can be inferred that more studies are needed related to the issue.

The determination of writing difficulties should be made by those who have adequate training and equipment in this area. Therefore, it might be useful to train the teachers on the identification of writing difficulties.

Writing difficulties might be studied from different aspects. Firstly, studies might be conducted on the improvement of writing abilities of students. Secondly, the effects of school or teacher anxiety on writing abilities of students. Finally, further studies might be conducted on the effectiveness of strategies, methods, and techniques for resolving writing difficulties.

**Keywords:** Writing difficulties, dysgraphia, italic handwriting, text legibility

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# The Long Term Effectiveness of Dialogic Reading Intervention in the Acquisition of Reading Skills

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*Several* studies have shown that children's early literacy skills are predictive of their reading and academic achievement in later school years (Spira, Bracken, & Fischel, 2005). Children lacking early literacy skills typically experience significant difficulties in learning to read and more likely fall behind their peers throughout the school years (Justice, Invernizzi, Geller, Sullivan, & Welsch, 2005; Snow, Burns, & Griffin, 1998). Therefore, it is important to provide children lacking early literacy skills with quality early intervention programs to reduce the gaps and help to equip them with the crucial language and literacy skills for the long term. Dialogic Reading (DR) has shown in several studies to be effective in improving the early literacy skills of young children particularly ones living in families with low socioeconomic status (Morgan & Meier, 2008; Whitehurst, Arnold et al., 1994). The purpose of this study was to investigate the long-term effectiveness of DR. In this follow-up study, children who participated in the DR program implemented in kindergarten were followed and tested in the first grade to examine their word decoding, reading fluency and comprehension performances in comparison to a control group of first graders who did not participate in the DR program.

## **Method**

The study group consisted of 72 first graders (DR group) who participated in the DR program implemented in six intervention conditions including classroom and home based administrations of DR for seven week during kindergarten and 73 of their peers (control group) who did not participate in the program. Children in the control group were selected among the same-gender peers attending the same classrooms of children in the DR group. Data were collected from 36 classrooms in 11 schools all of which were located in a neighborhood dominated by low SES families. All children were individually tested on measures of word decoding, reading fluency, and reading comprehension. The measure of word decoding developed by Baydik (2002) included two word lists with real and nonsense words. Each list consisted of 18 words. Words were printed on 8x14 cm cards and children were shown the cards and asked to read. Children received one point for each word they read accurately. Speed for reading the words was also measured. To assess children's reading fluency and accuracy, a text in the first grade reading level developed by Erdoğan (2009) was used. The text included a 162-word story. Reading fluency was assessed determining number of words read correctly in one minute and percent accuracy was assessed determining the number of words read inaccurately divided by the total number of words in the text. The same

text was used to assess children's reading comprehension skills as well. Children were asked to reread the text silently. Following the completion of reading they were presented 10 multiple choice questions related to the text developed also by Erdoğan (2009). Children received one point for each question answered correctly. Groups' performances on measures of reading were compared using One-Way Analysis of Variance. LSD post-hoc tests were used for the multiple comparisons among the DR interventions conditions. Effect sizes were also computed for each comparison.

### **Findings**

Results revealed that firstly, DR was effective in promoting acquisition of reading skills. Children who were implemented DR in kindergarten demonstrated higher performance in reading and reading comprehension skills in the first grade than their non-participating peers. Second, DR was most effective on reading comprehension skills compared to word decoding and reading fluency. Third, DR groups including home based implementation showed higher performance in the measures of reading than the DR implemented only in the classroom. Fourth, the intensity of DR emerged as a determining factor in children's performances. DR implemented in both home and classroom settings with whole class and small group administration promoted higher achievement in reading skills in comparison to the other DR intervention conditions.

### **Conclusion and Suggestions**

Schools attract a growing number of children every year, and an important number of these children are considered at risk for academic failure in subsequent years. Therefore, an instructional method that is effective, practical, and developmentally appropriate for achieving an increase in the early literacy skills and school readiness of at-risk children may significantly contribute to the academic achievement in later years. Thus considering the results of this study and previous findings indicating effectiveness of DR program implemented in early childhood, we recommend the widespread dissemination of DR in existing early childhood education programs is crucial to support children in the acquisition of reading skills. In addition, the results of this study showed that DR was most effective when parent involvement was ensured. Therefore, we also recommend to introduce DR to all parents and promote its use beginning from children's early years.

**Keywords:** Dialogic book reading, early intervention, long-term effectiveness, acquisition of reading skills

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# The Effectiveness of Mobility Skills on Visually Impaired Children Through Sibling Teaching<sup>1</sup>

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The people with visual disability experience limited independent action and environmental control (Altunay Arslantekin, 2013). Limited independent action negatively affects daily life abilities of the individual such as going to work, withdrawing money etc. This hinders the individual from integrating with community. Visually impaired people need freedom of action training for acting safely.

Freedom of action has two main dimensions: orientation and independent action skills. These two dimensions are defined as the people with visual disability make themselves act functionally and aimfully (Filan, 1998, s. 81). Orientation and independent action skills play an important role for visually impaired people to live independently.

It is emphasised that families and friends should support the children with visual disability in using independent action skills (Jacobson, 1993, s. 5). Sibling relationships enable to establish the first and a more natural environment for the affected children to learn the skills (Tsao and McCabe, 2010). In this regard; it is seen that the children having disability are supported with their peers with normal development, and they are enabled to acquire the skills through sibling teaching in the studies on teaching skills (Tekin, 1999; Alacia Trent, Kaiser and Wolery, 2005; Walton and Ingersoll, 2012).

In this study, the effectiveness of simultaneous clue method in teaching independent action skills by children with normal development to their siblings having visual disability is researched. For this purpose; the teachability of appropriate usage of simultaneous clue teaching method to the children having siblings with visual disability, and the effectiveness of teaching independent action skills to the children with visual disability through sibling teaching are indicated in this study.

## Method

In this study the children who have visual disability is stated as learning siblings, typically developed children are stated as instructive siblings. According to this, the study is conducted in Ankara with four visually impairment children and their typically developed siblings. Multiple probe model was used in this research among the single subject research models. Researcher taught the instructive siblings how to teach simultaneous prompting procedure. Implementation, generalisation and monitoring sessions were conducted on teaching independent skills through simultaneous clue method by teacher siblings. In accordance with

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<sup>1</sup> This abstract is based in part in an unpublished master thesis. [Görme yetersizliğinden etkilenmiş çocuklara kardeş öğretimi aracıyla sunulan bağımsız hareket becerilerinin eşzamanlı ipucuyla öğretiminin etkililiği]

this information, reliability data about the instructive siblings is gathered. Moreover, for the mobility skills, the efficient performance of the learning siblings is gathered. Furthermore social validity data and inter observer validity data which is taken from mothers, learning and instructive siblings are shown in the study.

## **Findings**

According to the data obtained from the siblings in the research, usage of simultaneous clue method by teacher siblings were observed to be effective and reliable in teaching independent action skills; effective in generalising for different independent action skills; and effective and reliable in maintaining independent action skills teaching through simultaneous clue on the 15th, 25th and 35th days after teaching. Besides, independent action skills through simultaneous clue method were determined to be effective for learner siblings to acquire, generalise for different environments, and maintain on the 15th, 25th and 35th days. Finally; parents, learner and teacher siblings expressed positive opinion on the social validity of the research.

## **Conclusions**

Simultaneous clue method was effective for teacher siblings to teach independent action skills according to the research. Besides, this method was observed to be generalised for different independent action skills. Independent action skills teaching through simultaneous clue method was permanent on the 15th, 25th and 35th days after teaching. Learner siblings were observed to acquire independent action skills effectively through this method. The findings of this research were consistent with the findings of the research conducted through sibling teaching (James and Egel, 1986; Tekin, 1999; Alacia Trent et al., 2005; Walton and Ingersoll, 2012). This study, in which independent action skills were taught by siblings, has significantly contributed to the lives of children with visual disability. Conducting the research on siblings has contributed to the social interaction between siblings, developed communication skills and supported the siblings' social skills.

## **Suggestions**

According to the results, these may be suggested for future researches and implementation: Routes may be thought by using simultaneous clue method through peer teaching. Teaching independent action skills through sibling teaching may be implemented by systematically withdrawing the clues. Effectiveness studies may be added in teaching different independent action skills using simultaneous clue method through sibling teaching. Effectiveness of the method may be studied in teaching independent action skills to the students having more than one disability.

**Keywords:** Mobility Skills, Visually Impairment Children, Sibling Teaching, Simultaneous Prompting Procedure.

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## **Lacks of Early Interventions of Child Abuse and Solutions from the View of Education**

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Child abuse which has complicated reasons and tragic results is a medical, legal, developmental and psychosocial, serious problem. ( Ziyalar 1999 and Polat 2002, Quoter: Kara and the others 2004.) Especially sexual abuse in the types of child abuse is the most difficult one to be noticed. Sexual abuse is being used a child for sexual satisfaction by somebody older. Early intervention is important because this can leave deep impact on a child.

There are many members of professions who come across sexual abuse. Medical doctors, forensic science experts, psychologists, constables, legists and social service experts are prioritized to be accoutered about this subject.

According to researches generally the age of the children who are abused is between 7-12. There are also some researchers who express the age limit is 6-10 and 12-14. It's certain that the age range is the time when the child leaves his/ her family for the first time. The child especially at school age feels being of two fundamental structures who protect him / her ; family and teacher.

At the present time there are both national and international results which reveal the augmentation of sexual violence especially targets children. UNICEF researched the data from 190 countries and prepared a report. This report revealed that in 2012 more than 120 million young girls were forced to make sex and one fifth of victims of murder consist of the young and children who are under 20 (AA 2014).

But in Turkey it is still difficult to talk about the data. One of the few data belongs to the Ministry of Justice. According to this in Turkey the crime of sexual assault, attack and abuse against children was 7500 in 2008, 13812 in 2009, 18334 in 2012 (Cumhuriyet 2013). It is seemed that child abuse is a current problem which need to be intervened.

The target of our research is not only educating this child but also the educators who are responsible for saving the child in case of sexual abuse.

The method of our research is qualitative. The semi-structured interview form was used and interviewed nearly for 17 hours. One of the sample schools was primary school and the other was secondary school. The data was collected from 44 volunteers who were composed of school directors and teachers. At the end of research, it was revealed that nearly all of the educators didn't have the knowledge of intervention in this situation. And they were confused about from whom they could get help. It was understood that they need to be educated about

this subject. Most of the educators think that because of the lack of the systems at school, they prefer applying to different authorities. The educators are not aware of the responsibility of reporting. And some of the educators may ignore the crime in some situations. Besides in our education system there is no preventive study on early intervention about child abuse.

We suggest to give effective education to our all educators. It is expected Ministry of Education to cooperate with other ministries. If social service experts cooperate with other ministries. If social service experts cooperate with counselors at school, it will be easy to intervene early and it will decrease the victims. Adding this subject to the syllabus will give information to children to save himself and to ask for help if necessary. Besides children's books will strengthen them. It is important to provide social awareness by public service announcement (PSA). Adding this project to education faculties, our educators' knowledge and awareness level will increase.

**Keywords:** Child sexual abuse, educators, early intervention.

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## **THEME 4: Inclusive Education**

# **School Administrators' Opinions on Special Education Teachers' Competencies**

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Identification of teachers' professional competencies are very important to improve the quality of instruction and also, teacher undergraduate programs. There are studies examined teachers' professional competencies from different perspectives (e.g. Güney, Aytan, & Gün, 2010; İzci, 2005; Özdemir, Özden, & Özden, 2010; Zengin, & Akgün, 2010) and a study in which special education teachers' and teacher candidates' professional competencies according to their view (Ergül, Baydık, and Demir, 2013) but there is no known study that examined special education teachers' competencies according to their administrators' view.

## **Problem**

The problem of the study was that examining school administrators' opinions on special education teachers' competencies and determining their views on problems related to special education teachers' competencies and their suggestions on how to improve teachers' competencies.

## **Purpose**

The purpose of this study was to examine school administrators' opinions on special education teachers' competencies. In the study, administrators' views on problems related to special education teachers' competencies and their suggestions on how to improve teachers' competencies were also investigated. The following research questions were answered in the study:

1. How were special education teachers' competencies on each "Special Education Teacher Program Field Competencies Scale (SETPFC) item?"
2. What were the administrators' views on problems related to special education teachers' competencies and suggestions on how to improve teachers' competencies?

## **Method**

### **Research Design**

A descriptive research design was used to conduct the study.

## **Participants**

In the study, 19 administrators of 19 private special education schools in Çankaya district of Ankara were asked to express their opinions on special education teachers' and their own professional competencies. The administrators expressed their opinions for all the teachers in their schools. The number of teachers was 114 who were assessed on their competencies by their administrators. The number of total participants was 123; 19 administrators and 114 special education teachers. Only 12 teachers were graduated from special education program.

## **Data collection tools**

In order to collect data, an information form and the Special Education Teacher Program Field Competencies Scale were used in the study. In the information form, the administrators were asked the program from they graduated, their work experiences, and the following questions:

1. What changes should be done in university education to train more qualified special education teachers?
2. Which courses or subjects should be mainly focused on more during their university education?
3. To which areas do your teachers need in-service training?
4. What are your suggestions on that you observe the problems and solutions relating to the qualification of teachers who employee in the special education area?

In addition the questions, The Special Education Teacher Program Field Competencies Scale (SETPFC) developed by Ergül, Baydık and Demir (2013) was used for obtaining data in the study. SETPFC is included 23 items related to special education teachers' professional competencies. The school administrators were asked to evaluate their teachers' special education professional competencies on each item in a five point Likert type scale.

## **Data collection process**

In the study, the information form and the scale were administered to the school administrators in their school.

## **Data analysis techniques**

The first question of the study was answered by using descriptive statistics (frequency and percentage). Because of only 12 of the 114 teachers were graduated from special education programs, effect of the variable of undergraduate program was not examined. The last question of the study was answered by using content analysis.

## **Results**

The results of the study showed that their school administrators rated the teachers were competent or highly competent on all Special Education Teacher Program Field Competencies Scale's (SETPFC) items.

The mostly stated changes should be done in university education to train more qualified special education teachers were that increasing practicing in schools and attention on parent education. Also, courses related parent education, speech and language teaching, and behavior management were the mostly suggested to focus more attention on the teacher undergraduate programs by the administrators. In addition, most of them stated that their teachers needed in-service education on behavior management and speech and language teaching.

## Discussion

In the light of the results of the study, it can be said that although that their school administrators rated the teachers were competent or highly competent in the special education field, the teachers needed in-service education on behavior management and speech and language teaching. Only 12 of the 114 teachers rated by their administrators were graduated from special education programs, and 40 of other teachers had special education certificate, and those of 62 had not. There are many studies in the literature showed that although they had special education certificate, teachers were incompetent in teaching and manage behavior problems (Henderson, Klein, Gonzalez, & Bradley, 2005; Nougaret, Scruggs, & Mastropieri, 2005; Sindelar, Daunic, & Rennells, 2004). In addition, it is stated in the literature that certificated teachers find themselves incompetent in these areas. In Ergül and their colleagues (2013), participant teachers and teacher candidates stated that they felt themselves more incompetent in these areas. The results of the study suggest that more attention should be given on teaching practicing and behaviour management in the teacher programs.

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# The Opinions of Academic Staffs, Educators and Prospective Educators on Inclusion Practices: A Qualitative Evaluation<sup>2</sup>

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The aim of this study is to reveal the opinions of academicians, educators and prospective educators on inclusion.

## Method

The data was obtained from the structured interviews with the undergraduates, postgraduates, doctoral students continuing their education in the departments of child development and education, preschool education, primary school teaching, special education and psychological counselling and guidance, academic staffs and the teachers working in these fields. Convenience sampling and snowball techniques were used in order to reach participants. The number of the participants was 51 in total; 11 undergraduates, 4 postgraduates, 9 doctoral students, 20 academic staffs and 7 teachers. The categories and codes from four main dimensions on inclusion (obstacles, opportunities, importance-necessity-benefit and suggestions) were reached by means of content analysis in interview transcriptions.

## Findings

Obstacle categories were listed under 9 categories as stereotypes-attitudes-thoughts, inefficient educators, support services, policies, obstacles, inclusive student, his/her family or teachers' burn out, education programmes, physical conditions and pressure on and expectations from the teacher.

It can be seen that two obstacles were predominant among the participants in stereotypes, attitudes and thoughts category. There were 46 participants emphasizing that the lack of knowledge- stereotypes and negative attitudes of community and families are obstacles, and 43 participants stating that the negative attitudes-approachs and opinions of teachers, students and school personnel hinder inclusion. Emphasize given to these two obstacles by the participants shows how much stereotypes affects inclusion practices. The points of view of educators and prospective educators were determined to affect the inclusion education process in previous studies (Rae et al., 2010; Sucuoğlu and Kargın, 2008).

Opportunity categories were listed under 7 categories as stakeholders, support services, new programmes-resources, pre-service and in-service training, positive approaches comparing to past, physical arrangements and media.

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<sup>2</sup> This abstract is based in part in an unpublished master thesis. [Kaynaştırmaya ilişkin eğitimci görüşleri aracı : Bir ölçek geliştirme çalışması]

The opportunity to improve the classroom/school conditions comparing to past in physical arrangements was emphasized by 7 participants. It is thought that the ‘opportunity of external environmental arrangements’ is the yellow tactile strips for visually impaired people.

It can be seen that two benefits were predominant among the participants in supporting child development category. There were 37 participants stating that inclusion contributes to the socialization of the student, 25 participants emphasizing that the senses of understanding the individual differences and respecting for differences will improve. The fact that the participants predominantly stated these two opinions gives rise to the thought that the traditional understanding on the benefits of inclusion repeats itself. When the body of literature of the last twenty years on inclusion are examined, it can be seen that both theoretical and research body of literature predominantly focus on these two benefits. For example; Kayılı et al. (2010) indicated that prospective teachers approve inclusion education and think that it has benefits for all children. Moreover, regarding inclusion as a right instead of a pragmatic point of view and emphasizing to give an opportunity of maximum development for all children in terms of its importance should be regarded as a requirement of the conception of modern childhood – the agentic child (Avcı, 2013).

Suggestion categories were listed under 11 categories as the opportunity of double major/minor in special education, required and/or selective special education-inclusion lessons at all education grades, MONE-Hospital collaboration, professional information-experience exchanging, raising public awareness, arrangements of programme, suggestions on support system, making changes in regulations/bringing legal obligations, inspections, physical arrangements and preparing pre-service/in-service education contents.

There were 4 participants suggesting to give the special education and inclusion lessons as required/selective lessons at all education grades beginning from primary school, especially in faculties of education.

There also were some participants suggesting to establish committees in schools to ensure collaborative education in addition to the participants suggesting network and/or face-to-face information and experience sharing in professional information-experience sharing category. It is thought that especially national and/or international level sharing over social networks will activate teachers.

## **Results**

It is known that teachers play a critic role in the efficiency and practicability of inclusion (Peter and Nderitu, 2014), but encounter many problems such as lack of knowledge (Silverman et al. 2010; Peter and Nderitu, 2014), quality concerns in teacher education programs (Peter and Nderitu, 2014) and lack of practice (Silverman et al. 2010). Inclusion incorporates a lot of benefits by using the existing opportunities besides many problems that may be encountered within the process (Peter and Nderitu, 2014). Peter and Nderitu (2014) stated that it is important to know these problems for creating new methods to solve the problems. In this regard, considering that some of the participants were teachers encountering these problems in person, the suggestions they made in terms of these problems which they encounter.

## **Suggestions**

A research with experimental design can be made with one or some of the suggestions made by the academicians, educators and prospective educators on inclusion and the process and results can be examined.

**Keywords:** Inclusion, Qualitative, Interview

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## **The Debate on Special Education versus Inclusive Education from the Perspective of Disabled Women**

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The debate on special education versus inclusive education is a very controversial issue. The proponents of special education and special schools -including some parents and children with disabilities- argue that disabled children are isolated and left alone in regular/mainstream schools while they have supportive and solidaristic relations with their peers in special schools. They also claim that special schools provide a more accessible environment; appropriate technical aids and equipment; trained and experienced special education teachers, and a better pupil-teacher ratio (Barnes & Mercer, 2010, p.107). Some scholars support special education especially for blind and deaf children, arguing that they are needed “to be taught separately” (Connor & Ferri, 2007, p. 72). This argument is supported by some parents who doubt that their children's needs would not be met with mainstream education/schools (Connor & Ferri, 2007, p.74). For example, Deaf parents and their organizations support schools for Deaf children which are characterized by Sign Language as the medium of instruction and informal interaction, and by “Deaf Culture” (Barnes & Mercer, 2010, p.107).

The opponents of special schools, on the other hand, criticize these schools for perpetuating the secondary or subordinate position of their graduates (Barnes & Mercer, 2010, p.108). “Grounded in the medical model” which views disability as a deviation from “what is normal” and so leads to marginalization, alienation, or exclusion of disabled people, special education was “positioned as an oppressive force” (Connor & Ferri, 2007, p.64). Inclusive education -especially as part of social equality and citizenship rights- on the other hand, is claimed to help remove ignorance and negative stereotypes; encourage friendship among disabled children and non-disabled children; provide disabled children with a broader curriculum; promote access to subject specialist teachers; and offer opportunities for the development of self-confidence and self-respect (Barnes & Mercer, 2010, p.108).

This study aims to examine the debate on special education versus inclusive education depending upon the educational experiences of women with visual impairments who live in Ankara. The universe of the research is determined as women with visual impairments. The research sample was formed through snowball method. In the study, qualitative research methods and techniques are employed, and 14 in-depth interviews and 2 focus group interviews (each focus group consists of 6 women) were conducted with 26 women with visual impairments. Semi-structured interviews are held in order to enable the participants speak freely in their own terms. The findings of the study demonstrates that the participants prefer inclusive education especially in terms of its contribution to the integration of people with disabilities. According to the participants, although being together with their peers who resemble them in terms of having visual impairment had some positive impacts on “the development of self-confidence and self-expression” , and “the formation of personality” , the same experience sometimes led to isolation, “loneliness” or “trauma. That is to say, in special schools they were marginalized and isolated from their non-disabled peers and the society. Disconnected from the outside world “for the sake of protection” and not being

allowed to leave the school except limited times, they were brought up without knowing what to do in the outside world. The participants' narratives also revealed that the isolation of disabled children from the society and their peers at special schools without any inclusive practices might later result in their further marginalisation, exclusion, and/or alienation in mainstream schools.

According to the participants, gaining entry into mainstream/general education classes after receiving education at special schools (without any inclusive practices) is such a long, hard, miserable and painful process that, in some cases, it causes dropping out of high school or, maybe worse than that, committing suicide. This is partly related to the fact that students are often not welcome in general education classes either by their peers or teachers who may resist to inclusion having a fear that disabled children would be "disruptive". This displays the need for "full and meaningful participation" of disabled students to promote integration or inclusion rather than their mere presence and visibility in general education classes (Connor & Ferri, 2007, p.72). This point is underlined by the participants who, despite complaining about its imperfections in its present form, still prefer inclusive education to special one and strongly emphasize the need to push for it especially for the sake of integration of disabled children.

**Keywords:** inclusive education, special education, women with visual impairments

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# Opinions and Needs of Mainstream Classroom Teachers about Classroom Management

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Taking into account the individual differences in the process of education/instruction yields one of the prominent topics in education as well as it is the basic condition for the right of having education. In this regard, as a choice of the least restrictive settings, mainstreaming/inclusive practices are one of the most preferred educational practices both in developed countries and in Turkey (Diken & Batu, 2010). Mainstreaming practices were initiated in 1980s in Turkey, since then in the scope of related legislation and regulations children with special needs have been placed into general education classrooms. Statistical data provided by Ministry of National Education (MoNe) (MEB, 2012) shows that the number of children with special needs in elementary school age in Turkey are quite high, and these children have the right to continue education at the schools where their peers attend according to Regulations for Special Education Services (Özel Eğitim Hizmetleri Yönetmeliği, 2006), therefore there are one or more students with special needs in the classrooms.

Effective mainstreaming in the literature suggests taking into account the students' individual differences and making educational/instructional practices as accepting all students as well as being inclusive (Diken & Batu, 2010). Therefore, effective and efficient learning settings become important for general education classrooms as well as mainstream classrooms, and teachers are held responsible for the effectiveness of mainstreaming practices. However, studies conducted in mainstream classrooms show that teachers have difficulties in effective instruction and classroom management (Greenwood & Carta, 1987; Marzano & Marzano, 2003; McIntosh, 1994). Even though effective classroom and behavior management are very critical especially for teachers who have students with special needs in their classrooms (Simonsen, Myers, & DeLuca, 2010; Sucuoğlu, Akalın, Sazak-Pınar, & Güner, 2008), classroom and behavior management in teacher education has been neglected in teacher education, and this neglect has led to poor education about this topic in undergraduate studies as well as in in-service education programs for teachers (Begeny & Martens, 2006). Therefore, it is suggested that mainstream teachers need support for classroom management (Kargın, Acarlar, & Sucuoğlu, 2005; Sucuoğlu et al., 2008).

## **Purpose:**

When the literature is reviewed, it can be seen that there is not any studies which examine in detail what teachers, whose responsibilities about mainstreaming practices have gradually increased, experience related to classroom and behavior management in mainstream classrooms in Turkey. The purpose of this study is to examine opinions and needs of elementary mainstream classroom teachers about mainstreaming and classroom management.

## **Method:**

The study group consisted of six teachers who were working in elementary schools of Çankaya and Altındağ provinces of Ankara, Turkey. In order to collect data, an interview form was developed that consisted of semi-structured questions to identify opinions,

competencies, needs of teachers about mainstreaming practices and about classroom management practices in mainstream classrooms; and in-depth interviews were conducted with teachers using this form.

### **Results:**

The first finding showed that the mainstream teachers had “*limitations in knowledge and skills about mainstreaming practices*” and they had “*difficulties in classroom management*” in mainstream classrooms. According to the first findings, teachers had the opinion that mainstreaming is “*beneficial*” for children with special needs and teachers gave more importance to having these students gain “*non-academic skills.*” Teachers indicated that there were “*factors related to school, teacher, family, and student*” that negatively affect mainstreaming practices. Teachers suggested that classroom management had “*academic and social-behavioral goals*” and they evaluated their classroom management as “*good.*” Teachers indicated that they had problems about classroom management with all students as well as students with special needs in terms of “*social-behavioral*” aspects and they generated a solution by “*talking, giving responsibility or engaging students in tasks, or providing peer support.*” Teachers emphasized that they lacked knowledge and skills about “*special education, mainstreaming, and classroom management.*” Teachers need “*education*” about classroom management in heterogeneous classrooms as well knowledge and support for “*physical and instructional adaptations for students with special needs.*” The research data are still being analyzed through induction. The results will be discussed in line with the mainstreaming practices in elementary schools in Turkey.

**Keywords:** Mainstream/inclusive classrooms, classroom management, teachers, semi-structured in depth interview, inductive analysis

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## Examining the Burden of Families with Mentally Disabled Children in Relation to Various Variables

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Parents take a lot of burden psychologically, socially and economically after their children have been diagnosed with “incompetency”. Family burden can be defined as all difficulties and challenges that parents experience as a result of a member of the family is diagnosed with “incompetency”.

*Purpose:* In this study, it was aimed to examine the burden of families that take their mentally disabled children to special education and rehabilitation centers in Sakarya Metropolitan Municipality in relation to various variables.

*Method:* This study is a descriptive study. In research group, there are 75 volunteer parents. The data collection tool was “Family Burden Assessment Scale” developed by Sari and Basbakkal (2008). Cronbach Alpha reliability coefficient of the scale is 0.92 and test-retest reliability correlation value is 0.98. To define the construct validity, researchers made exploratory factor analysis and it showed that the scale had a structure made up of 6 factors. This structure was confirmed with confirmatory factor analysis.

*Findings:* It was determined that there isn't significant difference in “economic status”, “social burden”, “emotional burden” and “time requirement” sub-dimensions of “Family Burden Assessment Scale” according to the intelligence level of mentally disabled child. It was determined that there is a significant difference in “incompetency perception” and “physical burden” sub-dimensions ( $X^2 = 10,260$ ;  $X^2 = 18,926$ ,  $p < .05$ ) of the scale. There is a significant difference in incompetency perceptions of slightly mentally disabled children's families and seriously mentally disabled children's families. After the comparison in physical burden sub-dimension, it was determined that there is a significant difference in physical burden of slightly mentally disabled children's families and moderate mentally disabled children's families, slightly mentally disabled children's families and seriously mentally disabled children's families. This significance is for seriously mentally disabled children's and slightly mentally disabled children's families. It was determined that there is a significant difference in economic burden sub-dimension of “Family Burden Assessment Scale” ( $U = 232,00$ ,  $p < .05$ ) according to economic status of families. Families who cannot afford the expenses have more economic burden. It was determined that there is a significant difference in incompetency perception and social burden sub-scales of “Family Burden Assessment Scale” ( $X^2 = 8,097$ ;  $X^2 = 13,737$ ,  $p < .05$ ) and in social burden sub-dimension of “Family Burden Assessment Scale” ( $U = 188,50$ ,  $p < .05$ ), according to have another mentally disabled child in the family. There isn't any significant difference in other sub-scales. After the comparison in incompetency perception sub-dimension and in social burden sub-dimension, it was found that families with 4 or more children have more incompetency and social burden

perception compared to families with one child or two children. Families with another mentally disabled child have more social burden.

*Conclusion and Suggestion:* The family is of multiple minds disabled children living in the family create change as "social burden". The multiple mind disabled children are more social burden of families. The number of children in families where the parents' perception of failure "and create a change in social burden". The inability to detect four and above child's perception of the inability of families is more than one child and two children A social burden for families with four children and more in families with social burden is more than two children. Economic situation of the family in which they live create a change in "economic burden". The family which doesn't meet with its income for expenses has more economic burden. Disabled children of families where the level of barriers create a change in "lack of perception" and "physical burden". Inability perception of failure is higher than in families with severe mental disabilities Physical load on the physical burden of families with moderate mental disabilities and families with children are more severely mentally disabled children from families with mild mental disabilities. This research can be done as a continuation of a similar survey with school-going children with mental retardation. The universe of the special education classes, training applications can be made by parents of students attending the school and business school.

**Keywords:** Parents with mentally retarded children, Family Burden, Family Burden Assessment Scale

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## **THEME 5: Reflections on Educational Psychology**

# The Study of Intrinsic Motivation of Haitian Middle and High School Students

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Motivation is defined as the process that initiates, guides, and maintains goal-oriented behaviors. Motivation is what causes us to act, whether it is getting a glass of water to reduce thirst or reading a book to gain knowledge (Nevid, 2013). Different types of motivation are frequently described as being either extrinsic or intrinsic. *Extrinsic motivations* are those that arise from outside of the individual and often involve rewards such as trophies, money, social recognition or praise (Nevid, 2013). *Intrinsic motivations* are those that arise from within the individual, such as doing a complicated cross-word puzzle purely for the personal gratification of solving a problem (Nevid, 2013). Intrinsic motivation has been studied since the early 1970s (Ryan&Deci, 2000). Seeing that any studies have been done in Haiti about motivation in education, and we think it should be done because there is a big difference between public and non-public schools in Haiti and so many other difficulties that could be involved. To create tasks that increase motivation and engagement we have to first, determine the level of motivation of the students.

Haiti was the first free nation of free men to arise within, and in resistance to, the emerging constellation of Western European empire” (Chomsky, 1991). The interaction of the New World's two oldest republics for 200 years again illustrates the persistence of basic themes of policy, their institutional roots and cultural concomitants (Chomsky, 2004). But until today more than 200,000 children in Haiti still do not have access to primary education (World Bank, 2015). And we actually think, this number may be the result of the massive earthquake of January 2010 that devastated almost every aspect of Haitian society but, it also presented an excellent opportunity to address the problems of the largely dysfunctional education sector. Since the current president decided that the primary education for all children under the age of fourteen should be free and compulsory, it also can be a good way to raise the level of motivation of the students in Haiti. The difficult economic situation of Haiti is one of the problems of schooling the children. Many families are incapable of meeting the direct and indirect costs of education because most schools in the country are private. The public schools are insufficient and they are in defavorable conditions. Out of modern materials even chalk for the traditional blackboards (Villard, 2013). In addition to these financial problems, there are linguistic barriers. Haitian Creole and French are official languages in Haiti, 100 percent of Haitians speak Creole nevertheless, the 10 percent most advantaged Haitians speak French (MENFP, 2008).

As we can imagine, Haitian children have to face the difficulties by starting to work early to survive and to bring something home (Frantz, 2011). This is one of the facts that might affect their motivation toward education. Most of them can see and understand the situation by taking their oldest as model, who, after several years of education have to move to another

country to follow their dreams. Additionally, there are only 15,200 primary schools in Haiti and 90% of them are non-public schools and managed by communities, religious organisations and NGOs (Wolff, 2008), and there are a few international private schools (run by Canada, USA, and France).

**The purpose** of this study is to examine the intrinsic motivation of Haitian middle and high school students attending public and non-public schools. **Method:** Since Haiti has the lowest income among the countries of the western hemisphere. The country is influenced by so many difficulties we think that might also affect the way the students act to face their future. Students (N=200) in middle and high school chosen from four different schools in Port-au-Prince, the capital of the country. And two different groups of students from private and public schools completed the questionnaire (The Academic Motivation Scale-AMS). Fifty students (25 students from middle school and 25 students from high school) from each school, in order to compare if there is any difference or change within ages. In this study the French version of Vallerand Motivation Test “*Echelle de Motivation en Education (EME)*” will be used for determining students’ motivation levels. This instrument includes 12 items, developed by Vallerand et al. (1989). Internal consistency level of French version of scale will be calculated. **Results:** In this study students’ motivation levels will be analyzed in terms of gender, age, grade and school types. For analyzing data descriptive statistics, T-test and ANOVA will be used. Data analyzing process has been ongoing. The findings of the study will be discussed in the light of the related literature.

**Keywords:** Intrinsic Motivation, Extrinsic Motivation, Amotivation, Haitian Students.

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# **Comparison of Face-to-Face and Online Counseling: Client Problems and Satisfaction**

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Unlike the traditional face-to-face intervention, online counseling is quite a new kind of help showing up by the growth of technology and widespreading quickly. One of the early examples of online counseling is a website called “Metanoia” with an award of media internet (Alleman, 2002).

Currently, like many countries all over the world, in Turkey people can reach websites delivering online psychological help via internet. After writing “online counseling” in the most popular search engine, more than two million results can be found, and it can be seen that numerous and different organizations and centres are offering counseling to individuals. The limited number of scientific studies conducted in Turkey in the field of online counseling can be considered to be a drawback in contrast to the great number of website addresses which can be easily available.

One of the main advantages of online counseling is its convince for people who live outside the big cities, in regions remote from the experts and centres where they can provide psychological help, for people who can not leave their home because of their physical disabilities or chronic diseases and its convenience for those who travel frequently (Cook ve Doyle, 2002; Kilroe, 2010; Shaw ve Shaw, 2006). Another advantage is that during an online contact, people can disclose themselves more easily which they cannot say in face –to-face communication (Alleman, 2002; Joinson ve Paine, 2007; Shaw ve Shaw, 2006). The results of Joyce’s (2012) research on college students indicated that online counseling might be a highly preferable choice for men with gender role conflicts or frictions, for individuals who worry about stigmatized to seek out support in mental health centers, and for individuals having difficulty in disclosing themselves as part of their personality traits. In a help relationship build upon written communication, although participants do not see and hear each other, many factors such as types of words, the method of putting these words together, colours, emoticons, emojis, the size of letters, their frequency of usage, the space between letters, can provide cues for understanding a client’s feelings, personality and the content of his/her message (Alleman, 2002).

Client satisfaction is one of the significant factors in therapeutic communication. Holmes (2011) and Brown (2012) pointed out that client satisfaction was closely related to the therapeutic relationship between the client and psychological counselor, and it is one of the main results of a successful psychological help. It is quite interesting to note that the literature on the field of online counseling include few studies concerning client satisfaction. In one of these researches Cook and Doyle (2002) concluded that no difference was observed between face-to-face counseling and online counseling in terms of client satisfaction. Similarly, Murphy et.al (2009) showed that from the point of view of clients, online counseling was as effective and satisfying as face-to-face counseling.

This study aims to compare traditional face-to-face counseling with online counseling in terms of clients’ reasons and satisfaction with qualitative and quantitative analysis. The

research is based on finding answers to the following questions: 1. What are the reasons of online and face-to-face client problems? 2. Do client problems differ according to face to face and online counseling? 3. What are the client's satisfaction levels of online and face to face counseling? 4. Do clients' views of satisfaction about counseling according to face-to-face or online counseling?

## **Method**

### **Participants**

This study collected data from 15 face-to-face and 6 online, twenty-one clients. They received counseling from seven volunteer senior students of Counseling and Guidance Program at Yeditepe University in the spring term of 2012.

All volunteer participants completed and signed an informed consent form. Twelve (57%) of the participants were female whereas 9 (42,9%) of them were male. Average age of the participants was 22,3. Nineteen (%90,5) participants were undergraduate and 2 (%9,5) of them were employed with a university degree.

In the research, 105 sessions were carried out face-to-face and 48 sessions were online.

### **Instruments**

In this study, Client Information Form and a Client Satisfaction Form, as part of data collection process. In addition, audio and written recordings of termination sessions of face-to-face and online counseling were also used as an instrument.

### **Data Analysis**

Content analysis method was used to analyze the qualitative data collected in this research. Sentences and phrases were specified as a unit of data analysis.

## **Findings**

### **Client Problems**

In the Client Information Form, participants were asked to determine their problems and they were informed they could write down more than one reason. In the analysis of the participants' answers, it is significant to note some common words and phrases. As a result of the analysis, the themes of the statements into five categories: "Personal problems", "Problems about career development", "Academic problems", "Romantic relationship problems" and "Family problems".

### **Client Satisfaction**

To assess client satisfaction, participants were asked open-ended questions in the Client Satisfaction Form. They were asked whether they thought psychological help was beneficial, whether the counseling intervention met their aims. The analysis of the termination sessions and responses to the questions in the Client Satisfaction Form were examined together. As a result of the analysis, the themes of the statements about the contentment of the clients broke down into eight categories: "Receiving benefit/Taking advantage"; "Becoming relaxed/Feeling good"; "Finding solutions to problems"; "Increasing awareness"; "Not finding solutions to some problems"; Self-disclosing beyond expectation; "Sharing problems"; "Changing attitude to Psychological Counseling".

## Discussion and Conclusion

Taken together, the findings of this research suggest that face-to-face and online clients shared similar reasons for seeking psychological help. All the participants were satisfied with the counseling process and satisfaction of face-to-face clients was quite similar to satisfaction of online clients. This result coincides with the results derived from the studies of Cook and Doyle (2002), Murphy et al. (2009), Kilroe (2010) and Brown (2012) who have concluded that online counseling offer as much satisfaction as face-to-face psychological counseling.

Online counseling is a novel method of help which has gained a lot of importance with the development of technology, rapid proliferation of internet, growth in smart phone usages and limitless facilities provided by mobile communication. Today many people experience difficulty receiving psychological help because of economic insufficiencies, time problems and the absence of a counselor nearby. Besides, online counseling offers an alternative way of therapy for those who are afraid of being stigmatized and self-disclosing.

**Key words:** Online counseling, client problems, client satisfaction, technology, internet.

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# **Processes Influencing Democratic Ownership and Participation: Turkish Results of an International Study on Participation and Civic Engagement Among Young People from Different Cultural Backgrounds**

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Participation is a concept that has been essential for not only political scientific research but also sociology, psychology, education and history. It refers to a condition in which every citizen has the means to actively engage in the public sphere, including political processes. As the definition of citizenship emphasized, civic engagement and participation are not only important for the individual holding a citizenship status. According to Menezes (2003), they allow citizens to develop personal and social competencies essential for political action (Stewart & Weinstein, 1997), to become empowered by exerting control over their lives and life of their communities (Zimmerman, 1995), to improve their sense of community (De Piccoli et al, 2002), to get involved in the process of public deliberation over citizenship definition and expansion (Habermas, 1999) and to experience face to face interactions with other citizens who might have different perspectives on the common good, thus increasing both social pluralism (Arendt, 1958), interpersonal trust and tolerance (Stewart & Weinstein, 1997). In addition, participation experiences during youth seem to be a good predictor of political engagement during the adult years (Flaganan & Sherrod, 1998). Since those factors are thought being related on the process of civic engagement, it is essential to understand the internal and external indicators that are related with individual acts in a relevant manner. On the other hand, the definition of Verba, Schlozman & Brady (1995) brings the importance of non-conventional forms of participation especially for the groups at risk such as young people, women, migrants and minorities.

This paper will focus on the question of political participation and civic engagement with presenting the results of an international project called PIDOP - Processes Influencing Democratic Ownership and Participation[1] that aims to examine macro-level contextual factors (including historical, political, electoral, economic and policy factors), proximal social factors (including familial, educational and media factors) and psychological factors (including motivational, cognitive, attitudinal and identity factors) which facilitate and/or inhibit civic and political engagement and participation. The papers will explain the predictors of participation and civic engagement in different cultural contexts and the perspectives of young people in terms of opportunities and barriers they experience when they engage with conventional and non-conventional ways of participation.

## **Purpose**

The aim of this paper is to focus on the different types of civic/political participation and the possible predictors for the civic/political participation among young people living in Turkey. The differences between three ethnic groups were determined. The study, conducted by the Turkish team included young people from three sub-groups: The majority Turks (N=253), Turkish resettlers from Bulgaria (N=242) and the Roma people (N=237). Roma people are taken as the minority group knowing that they are *not* officially recognized as minority.

Although the characteristics and the backgrounds of these groups differ (Stewart & Weinstein, 1997), most of them hold Turkish citizen and were born in Turkey. 732 young participants aged between 16 and 26 and having diverse ethnic backgrounds took part in the study. Results indicated differences according to ethnicity and age in the light of cultural contexts.

## **Results**

This study has shown that there are significant differences both in participation and in the predictors of participation between the three ethnic groups that were studied. The Turkish group showed lower participation levels than the other two groups over the previous 12 months. Given the fact that there are research findings (e.g, Torgerson, Gorard, Ainsworth, See & Wright; 2008; Muller & Vothknecht, 2011) that show that minority ethnic groups have higher rates of participation than the majority in different cultures, we can consider perceptions of inequality (Uslaner & Brown, 2003, p2) may enhance participation. Motivation appeared as a significant effect for participation particularly for Roma youth. Roma youth showed higher levels of motivation especially than the resettlers. Although the motivation seemed to be the lowest in Bulgarian resettlers, it is important to see that the participation over the previous 12 months as well as the perceived quality of participation in terms of action was seen the highest among them. This may be due to their perceived social norm support for participation. As most of the Bulgarian resettlers hold double citizenship, they might have a feeling of ascribing themselves as Turkish (Suter, 2008). They do not have the feeling of discrimination and are not regarded unfavourable as in Roma youth. Therefore, motivations and barriers that may affect young people's ability to participate should be identified in order to develop youth participation strategies.

In order to clarify further the relationship between the incidence of participation in the previous 12 months and all the other variables, three stepwise regression analyses were performed, one for each ethnic group individually, with participation in the previous 12 months as the dependent variable. It is seen that there are significant differences both in participation and in the predictors of participation between the three ethnic groups that were studied. The regression for the Turkish majority youth revealed that the main predictors of participation were the quality of the action in previous participation experiences ( $\beta = .56, p < .001$ ), political interest and (negatively) external efficacy. Given the fact that there are research findings (e.g, Torgerson, Gorard, Ainsworth, See & Wright; 2008; Muller & Vothknecht, 2011) that show that minority ethnic groups have higher rates of participation than the majority in different cultures, we can consider perceptions of inequality (Uslaner & Brown, 2003, p2) may enhance participation. This may be due to the fact that they might perceive that their views are not presented or considered. Therefore, motivations and barriers that may affect young people's ability to participate should be identified in order to develop youth participation strategies.

The group of demographic and psychological factors seems to be essential for predicting the participation behaviour in all groups. Gender and age in the first step, demographic factors in the second step and the measures for perception of social environment proves a significant importance on explaining the alteration of the total participation. This impact on civic/political participation seems to be more of a case for those who are from disadvantaged ethnic minorities. Interpreting the participation types and frequencies of youth, a consideration of the political and economic changes in Turkey's history is necessary.

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# **Investigating the Effect of Problem Solving Skill and Empathy on Life Satisfaction**

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Life satisfaction has been discussed since time of Confucius and Aristotle because of individuals tends to evaluate their lives. Especially last three decades has seen an increase in studies again the concept of life satisfaction, well being and their determinants (Martin, Perles, Canto, 2010).

Pavot and Diener (1993) describe the life satisfaction as individual's pleasure with his or her life. By the help of life satisfaction individuals try to generalize quality of their lives, therefore it is affected by numerous aspects of life (Frijns, 2010). Socioental resources like economic welfare, social equality, personal resources such as social position, family bonds, and personal abilities like physical fitness, intellectual skills, empathy, problem solving and etc. are the determinants of life satisfaction (Veenhoven, 1996).

In this study empathy and problem solving abilities which are handled as personal abilities will be discussed as the determinants of life satisfaction. Problem solving is a daily activity to cope with all positive and negative situations and demands (Heppner, Witty, Dixon; 2004). Therefore, Dixon and Glover (1984) emphasize the importance of teaching how to solve their problems that they have trouble about it. Another metacognitive ability is empathy including emotional and cognitive processes that promote and a reintegral sections of effective relationships and prosocial interactions (Grühn, Rebuca, Diehl, Lumley, & Labouvie-Vief, 2008).

University life leads students a lot of problem situation like separation from family, adopting different and stressful setting. Therefore their life satisfaction can be affected negatively, acceptable problem solving skill and empathy can be positive effect for stressful conditions and life satisfaction (Carnicer, Caldecon, 2014).

The aim of this study is to investigate the effect of problem solving skill on life satisfaction through empathy. This aim was tested in the following model

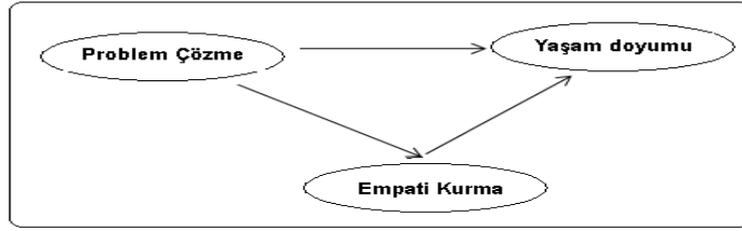


Figure 1. Conceptual Model

## Method

### Research Model

Correlational research design was used considering the focus of the research, as it is about the relationship between two or more variables and the influential variables determining these relationships

### Research Group

In determining the research group, maximum variation sampling which is one of the type purposive sampling techniques was used. The data gathering from 230 university students educated in Ankara, Gazi, Hacettepe, Yıldırım Beyazıt Universities' faculties of law, education, science and literature and engineering.

### Data Collection

Following data collection tolls are used;

- "Life Satisfaction Scale" which is developed by Diener et. al. (1985)
- "Emphatic Tendency Scale" developed by Dökmen (1988)
- "Problem Solving Inventory developed by Heppner and Petersen (1982)

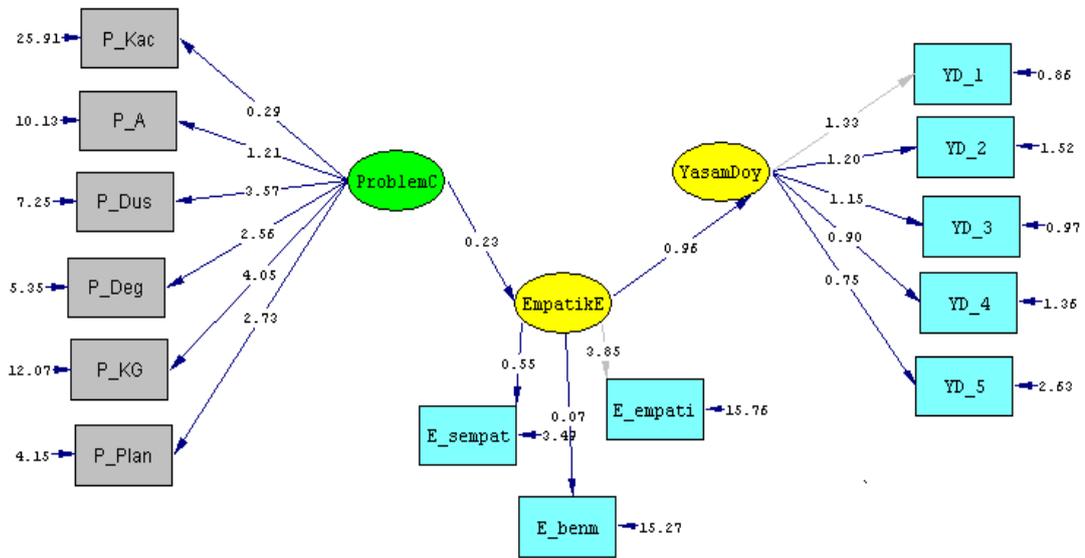
Structural Equation Model was set to analyzing data and the model was tested trough the aim of investigation by using LISREL 8.54 packet program.

## Results

Conceptual model which was set through the aim of study was tested by structural equation model. The results of analyse represented following Table 1 and Figure 1.

Table 1. Fit Indexes of Conceptual Model

Model	$\chi^2$	sd	$\chi^2/sd$	p	AGFI	GFI	CFI	NFI	SRMR	RMSEA
<b>Conceptual Model</b>	115,36	75	1,53	0,002	0,90	0,92	0,96	0,90	0,05	0,05



Chi-Square=115.36, df=75, P-value=0.00191, RMSEA=0.052

Figure 1. Path Diagram of the Conceptual Model

According to the result of the analysis, the rate of the conceptual model's chi-square value to degree of freedom ( $\chi^2/df=1.53$ ) is within the acceptable limitation ( $\chi^2/df \leq 5$ ). This result can be interpreted as the model has a good fit index. When RMSEA (0.05), GFI (0.92), AGFI (0.90) indexes are discussed, it is seen that the model is acceptable. Moreover, CFI (0.96), NFI (0.90) and SRMR (0.05) indexes are other indicators to present the fit of the model. Therefore, the results show that problem-solving skill predicts life satisfaction through empathic tendency level.

### Discussion

The analyses carried out show that empathy is related directly to life satisfaction. This is consistent with previous findings in the literature (Shanafelt, West, Zhao, Novotny, Kolars & Habermann, 2005). The relation of dealing with the problems of life in appropriate ways and high life satisfaction is another result of this study. In conclusion, university students who experience stressful events are able to recognize their problem-solving skill and empathic tendency to cope with problems by the way their life satisfaction can be affected positively. University programs should be developed for students to enhance life span development in every country and should aim to increase life satisfaction.

**Keywords:** Life satisfaction, problem-solving skill, empathic tendency, structural equation modeling.

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## **Educating for Indigenous Community; Suku Anak Dalam through Social Empowerment Based on Local Cultural Skill**

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Suku Anak Dalam (SAD) is an Indigenous minority which lives in the forest of Jambi province, Indonesia. The population consist of 2.951 householder or 12.909 souls which spread across in the three of main districts; Batanghari, Bungo Tebo and Sarolangun. Indigenous community has very different culture from the main society. They have been living in the forest for thousands of years. Because of those they are isolated from the main society and developed totally different social and cultural characteristic (Saudagar, 2005). As a consequently they are deprived of education. Their daily life depends heavily on the forest. In fact the forest was changed into palm oil farming by the company in large scale. This situation effects their life into the lack of welfare (<http://www.depsos.gi.id/modules.php>, 2008).

**Purpose:** The aim of this study is to introduce the program in developing and implementing special education for indigenous community of Suku Anak Dalam through social empowerment based on local cultural skill as a values of local wisdom.

**Research Design:** This study designed as an ethnographic field of study. Ethnographic as a method of investigation deals with the study of the diversity of human cultures in particular cultural settings. The emphasis in ethnographic is on studying an entire culture (Prill-Brett, n.d). In this study, we assembled a team of researchers who are devoted to the betterment of life conditions of people under investigation. Researcher team employed a cultural approach to learn Suku Anak Dalam's characteristics. Ethnographic approach locates culture as the central focus of its attention.

**Participants:** Research was held by three experts of supervisors and 5 students that come from different field of studies; 3 students are from education, one student is from economy and one student is from agriculture faculty. Supervisors are from creativity and innovation expert, economist and historian of Jambi province. The participants are the family of Suku Anak Dalam that consist of 12 families. The location is in the forest park of Senami – Batanghari, Jambi. This program has been conducted since January 2010 until 2012. Nowadays this program are still in advance progress.

**Data collection tool:** Instrument of collecting data consists of study literature, observation, interview, and documentation. Researcher team collects some literature which is related to Suku Anak Dalam. The observation was conducted through some custom procedurals such as; meet the custom head to ask permission. Then, make an informal interview and join in their daily life activity. Researcher team take notes detailed, pictures and record the videos.

**Technique of data analysis:** Researcher team observed and approached to Suku Anak Dalam since January 30th to June 28th 2010. As long as the process of program implementation, researchers collect data and take notes in every detailed of Suku Anak Dalam changing. Technique of data analysis used qualitative method. 1) Starting from preliminary study by

reading study of literature about Suku Anak Dalam 2). Processing the result of interview data, documentation and observation that conducted in location 3). Validation the result of interview data, documentation, and observation together with historian, creative and innovation, and economy supervisor 4). These data was analyzed and discussed with supervisor who expert in each of field.

**Findings:** Based on the observation, there are some basics characteristics of Suku Anak Dalam. 1) Suku Anak Dalam was familiar in using forest products as household, 2) Suku Anak Dalam very preserve toward culture heritage in weaving of rattan, 3) Suku Anak Dalam preserve of culture heritage such as holding ceremonial heritage and believe to ancestral spirit, 4) Suku Anak Dalam use traditional medical process through traditional ceremony, 5) Suku Anak Dalam don't have future orientation. They think only for today "here and now," not for future. This mindset effects Suku Anak Dalam's life which caused lack of welfare; education, economic and health. Researchers team used these basics characteristics as a power to solve the problem.

**Discussion:** Researchers team created education program and guided Suku Anak Dalam community in doing the program through social empowerment. Team used their basics local skill in conducting program. Teaching metode is by stimulating them to make rattan product as their basic ability through cultural approach, such as join in their daily life activity; go to the forest, fishing in river, gathering fruits and anothers. Then researcher team designed the rattan product by integrating with technological aspect, such as modifying become wall decoration. Then researcher team show this modern product for Suku Anak Dalam to stimulate creativity. Next step researcher team shows some innovative pictures of rattan products. It was aimed to stimulate Suku Anak Dalam mindset. This teaching method is effective to stimulate the willingness and increase creativity. They are not only make household utensil but also creative products such as table flowers, decorative lamps, pencil box and others. Product increase in values; design and economically. Indigenous community begin to weaving rattan as their daily activity for daily income. In this study researchers team become the main consumer. Then researchers team modify into modern one and promote the products in local and national exhibition.

**Conclusion:** Education for Suku Anak Dalam through social empowerment based on local culture skill is appropriate as an alternative education. This special education program changed their mindset into future oriented as a value of education core. They more open and accept for live in advance; begin to go to the hospital for medical need, make an interaction to main society. Their children also begin to learn in reading and writing that offer by researcher team. It is meaningfull influence at large. Future, the implementation of the program is expected able to foster entrepreneurship spirit of Suku Anak Dalam through developing of creative industry.

**Keywords :** Indigenous, SAD, empowerment, local culture

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# Relationships Between Work Related Flow, Job Satisfaction and Burnout Among Teachers

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In the field of psychology, positive features of humans has been investigated in the late of 1990s. One of the main concepts of positive psychology is flow. The term of flow first identified by Mihaly Csikszentmihalyi who is well known psychologist in the field of positive psychology. According to Csikszentmihalyi flow, as “the holistic sensation that people feel when they act with total involvement” a state that is characterized by a sense of self-control and pleasure. Flow at work defined as a short-term peak experience characterized by absorption, work enjoyment, and intrinsic work motivation. According to Bakker (2005, 2008), there are three related dimensions of flow. Absorption refers to total concentration and immersion in the activity. It represents the dimension that flow and work engagement have in common. The enjoyment dimension of flow is the outcome of cognitive and affective evaluations of the flow experience. Finally, intrinsic motivation refers to the state in which people engage in the work activity for their own sake rather than for some extrinsic reward. Work related flow has significant relationships many psychological, individual and organizational variables. Such as self-efficacy, optimism, coping behaviours, job satisfaction, burnout, work engagement, etc. This study has two purposes. One of purpose of this study is adapting Work Related Flow Inventory (WOLF) into Turkish. And the other is investigating between relationships between work related flow, job satisfaction and burnout. For the fulfill the first pupose of this study Work Related Flow Inventory (WOLF) translated into Turkish by researchers. After, translated form and original form was sent three English language speacilists for checking translation and feedbacks was received by them. After scale form was sent seven specialists whose have Ph.D degree in the fields of measurement and evaluation and psychological counseling for receiving feedbacks about scale. After receiving feedbacks last form of scale has been consturcted.

## Method

In this study first Work Related Flow Inventory (Bakker, 2008) translated into Turkish and psychometric properites of the scale has been investigated. This scale has thirteen items and three dimensions (Absorbtion, Work enjotment and Intrinsic work motivation). For study of validity and reliability scale was conducted 228 teachers whose have different branches. Cronbach’s Alpha coefficients of original form of this scale was calculated and coefficients ranged between .75 and .86 for absorption, .88 and .96 for work enjoyment, and .63 and .82 for intrinsic work motivation. In this study we found .84 for absorbtion, .94 and .83 for intrinsic work motivation. For structure validity of scale Confirmatory Factor Analysis (CFA) was used and goodness of fit indexes was calculated. In CFA analysis factor loads of scale items was ranged .35-.91. Goodness of fit indexes for scale was found for  $X^2/Df$  ratio= 2,22; RMSEA=.11; NFI=.95; NNFI=.96; CFI=.97; IFI=.97; GFI=.83 ve AGFI=.75. After this analyses WOLF was found a reliable and valid scale. Determining convergent and

discriminant validity of WOLF, Positive and Negative Affect Scale (PANAS) developed by Watson, Clark & Tellegen (1988) adapted into Turkish Gençöz (2000) and Satisfaction with Life Scales developed by Diener, Emmons, Larsen & Griffin (1985) adapted into Turkish by Köker (1991) were used. For investigation relationships between work related flow, job satisfaction and burnout besides WOLF, Maslach Burnout Inventory developed by Maslach & Jackson (1981) translated into Turkish by Ergin (1992) and Minnesota Job Satisfaction Questionnaire developed by Weis, England, David & Lofquist (1967) adapted into Turkish by Baycan (1985) has been used. Data analyzing still has been ongoing. For analyzing data descriptive statistics, Pearson Product-Moment Correlation and Structural Equation modeling techniques will be used.

### **Findings**

In this study positive relationships between dimensions of flow and job satisfaction and negative relationships between flow and burnout expected.

### **Conclusions**

In this study Work Related Flow Inventory's psychometric properties has been tested. And this scale reliable and a valid scale. Other findings of the study will be discussed related literature.

**Suggestions:** Based on findings of this study some suggestions will be offered for practice and Turkish educational system.

**Keywords:** Flow Theory, Work Related Flow, Burnout, Job Satisfaction.

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# An Analysis of from Primary School to University Students' Perceptions of Intelligence

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## Introduction

People's level of motivation, affective states, and actions are based more on what they believe than on what is objectively the case. Hence, it is people's beliefs in their causative capabilities that is the major focus of inquiry. Much of the research generated by the various theories is tied to an omnibus measure of perceived control and devoted to the search for its psychosocial correlates (Bandura, 1995, p.2). In this context, Dweck's social-cognitive theory of motivation has attracted a great deal of attention since the past two decades. One of the key concept of this model is beliefs (implicit/mindset theories) that learners hold on the nature of intelligence (Dupeyrat & Mariné, 2005, p:44). According to this model, there are entirely different ways that people understand intelligence (Dweck, 2000,p. 2-4 ):

### The Theory of Fixed Intelligence (entity theory)

In this theory, people believe that their intelligence is a fixed trait. They have a certain amount of it, and it can't change (Dweck, 2000,p. 2-4). Students are primarily focused on obtaining good performance in order to document to themselves or others the adequacy of their ability: they are oriented towards performance goals. This pursuit of performance goals leads them to minimize their effort expenditure, to give up easily when faced with challenges or drawbacks, and generally to avoid task they might have difficulties to master (Dupeyrat & Mariné, 2005, p:44).

### The Theory of Malleable/Growth Intelligence (incremental theory)

According to incremental theory, intelligence is not a fixed trait that simply possess, but something they can cultivate through learning (Dweck, 2000,p. 2-4 ). Students are mainly focused on improving their competence and acquiring new knowledge: they are oriented towards mastery goals. In order to meet with these mastery goals, they are willing to expend the necessary effort, to seek out challenging or difficult situations that promote learning, and to persist to overcome possible or even necessary setbacks (Dupeyrat & Mariné, 2005, p:44). Both of theory is summarized in Table 1 (Yeager, Paunesku, Walton & Dweck, 2013, p.5).

**Table 1.** Entity and incremental theory

	<b>Entity theory</b>	<b>Incremental theory</b>
Goals	Look smart (don't look dumb)	Learn
Value of effort, help and strategies?	Lower	Higher
Response to challenge	Tendency to give up	Work harder and smarter
Changes in grades during times of adversity	Decrease or remain low	Increase

In conclusion, students believe they achieve for a variety of reasons, and their beliefs and interests are very important in determining how they deal with failure, the risks they are willing to take, and the ways in which they interact with problems and learning opportunities. Therefore, students' interests and their beliefs about the reasons they succeed or fail can dramatically affect their achievement (Siegle, Rubenstein, Pollard & Romey, 2010, p.92). Also, Because there is a relationship between the implicit theories of the teacher and the teacher's educational goals (Lynott and Wolfolk, 1994; Lee, 1996), to determine kind of beliefs that preservice teachers hold on the nature of intelligence is very important.

### **Aim of Study**

One of the purpose of this study is to adapt the Implicit Theory of Intelligence Scale for Children and Adults (ITIS) by Dweck to Turkish. Also, to determine kind of beliefs that learners who enroll in from primary school to university hold on the nature of intelligence according to class level, gender, age, and success of school variables.

### **Method**

In this study, quantitative research paradigm was utilized and steps of scale adaptation recommended by Hambleton and Patsula (1999) was followed.

### **Participants**

There are four study group in this research. One of study group of the research was composed of 330 students enrolled in primary, secondary, and high school to adapt the Implicit Theory of Intelligence Scale for children. The other study group of the research was composed of 298 students enrolled in university to adapt the Implicit Theory of Intelligence Scale for adult. Also, two study groups were composed of 1350 students, to determine kind of beliefs that learners who enroll in primary, secondary, high school, and university hold on the nature of intelligence according to class level, gender, age, and success of school variables.

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# Self-Constrol as a Predictor of Psychological Resilience in High School Students<sup>3</sup>

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## Introduction

Various structures and concepts have lately been brought forward by researchers who focused on concepts that protect and strengthen psychological health. One of these concepts is psychological strength.

Although different definitions about Psychological Resilience exist, the common points of the definitions are the individual facing one or more negative experiences and risk factors, protective factors existing with these factors and the process of complying with life in a healthy way (Rutter, 2012).

The factors that prompt the psychological resilience of the individual are still a debated issue that continues to be an interesting subject for researchers (Kararmak, 2011). The self-construal as one of the structures that influence the affect, thought and behavior pattern of the individual (Markus and Kitayama, 1991) and guide the individual is thought to be influencing psychological strength. Self is a social structure since it comes into existence as a result of social interactions and it is located in a social position (Kağıtçıbaşı, 2010). Self-construal on the other hand is how the individual sees himself/herself and others (Cross et.al, 2011).

Self-construal in the western body of literature was initially classified as a two dimensional self-construal basically – independent and interdependent self-construal – however a threesome self structure has come to the forefront recently rather than the dual self-construal structure (Cross and Madson, 1997; Triandis, 1989; Madson and Trafimow, 2001). Brewer and Gardner (1996) addressed self orientation on three levels as individual, collective and relational self. In Turkey, Kağıtçıbaşı proposed the autonomous-relational self-construal that combines autonomy and relationality in a synthesis (Kağıtçıbaşı, 1996).

The adolescence period is a period in which turbulences, fluxes and refluxes are experienced. In face of the difficulties, developments and problems that are possible to confront the adolescent, the psychological resilience factor will have an important function. Nevertheless, while the adolescent tries to achieve his/her autonomy, the effect of the adolescent's family and family relations on his/her relations with others still continues. In this critical process, self-construal is thought to determine and influence the point of view of the adolescent to life and his/her environment.

The purpose of this study is to analyze the role of self-construal as the predictor of psychological resilience of high school students. In addition, whether psychological resilience

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<sup>3</sup> This study is a part of the master's thesis that is conducted with the consultancy of Associate Professor Dr. Recep Koçak.

and self-construal of high school students vary according to gender variable or not will be examined.

## Method

The study is a descriptive study that depends on relational screening model. The sample of the study consists of 764 participants – 378 female (49.5%) and 386 male (50.5%) participants. The ages of the group range from 14 to 22 and the average age is 16.95.

Two scales were used in order to collect the research data. “Resilience and Youth Development Module” was used in order to measure the psychological resilience levels of high school students; “Autonomous-Relational Self Scales in Family” were used in order to determine the self-construals of students. The research data were analyzed by using “Unrelated Samples t-Test” and “Multiple Regression”.

## Findings

According to the findings with regard to gender, there is significant difference in favor of female students in the psychological resilience levels of the participant students [ $t(762) = 2.136, p < 0.05$ ].

A t-test was performed in order to understand whether the self-construals of high school students change according to gender, and the results reveal that there is significant difference according to gender in all three self models: [ $t(762) = -4.277, p < 0.01$ ].

## Conclusions

According to the results of the multiple regression analysis regarding the self-construals of the participant students predicting the psychological resilience levels of them, it is understood that the psychological resilience levels of high school students are significantly predicted by the autonomous, relational and autonomous-relational self models ( $r = 0.39, r^2 = 0.15, p < 0.01$ ).

It is understood that two of the self-construals which are the relational self and autonomous-relational self together explain the 15% of ( $R^2 = .153$ ) the psychological resilience levels of high school students.

## Suggestions

According to the results of the study; two of the self-construal models which are the relational and autonomous-relational self models were found as important predictors of psychological resilience. In the intervention programs that are prepared to increase the psychological resilience levels of individuals and in the consultancy services that are offered to individuals, the activities that bring the relational self and autonomous-relational self models into the forefront are thought to be contributing the psychological resilience levels of individuals.

**Keywords:** Psychological Resilience, Self-Construal, High School Student

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## **Teacher-student Relationship Class of the Role of Psychological Characteristics**

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The head of the class action are of particular importance in the management of the school. These individuals are required to create an environment of mutual communication and establishing a system administrator and information transmission mechanisms work properly and as in desirable. The head of the class, students should be able to establish the necessary communication with parents and teachers, subject only to the caring, attentive and class so that students in education and formation as individuals to obtain advances of its activities attaches great support. School always be tracked and analyzed the activity of the head of the main administration as one the branches of the class should.

Nowadays, many people of society, especially older generation claim about negative impact of influence of globalization to the relationship between teachers and pupils during training process. In fact it is not. This is the fact of people that have got used traditional approach without accepting modern requirements and needs.

The successful implementation of modern technologies in the educational process helps student's ability to come to light, adopt variety of skills, in short provides develop real personality. In this issue teacher has more responsibility. From this point of view modern educator should be thoroughly and combine qualities that could be given to the teacher at the present time.

One of the main factors that ensure that children need "to return" to fiction to read in students speech development. This process is not in retail form and be in the form of system. The content of literary work and analysis of student activities used in the future to ensure a healthy belief and thought it was.

The head of the class action are of particular importance in the management of the school. These individuals are required to create an environment of mutual communication and establishing a system administrator and information transmission mechanisms work properly and as in desirable.

The intellectual development of younger children with mental problems in the learning process aims to prepare the system work , training content , forms, methods, tools, and the mutual relationship between the educational and work and educational development of children.

For opespecheniyav v sestorennego development of these children teachers -educators need to work on yourself and need to create conditions for increasing the potential of employees in this area. The relationships that are developed in the school setting are some of the most The relationships that are developed in the school setting are some of the most influential aspects in the development of personal character. How we function in society as individual citizens is related to the quality of the relationships that we have developed with our peers and teachers.

The skills that are honed while pursuing, developing, and refining the art of building relationships are skills that require years of practice, yet they sustain us in our adult years. Accordingly, it is part of my belief about teaching that student-teacher relationships have an impact on individuals' success inside and outside of school. As adults, we reminisce about our earlier years as students, and it is a rare occasion that algebra, spelling, history, or typing is talked about. Rather, it is the teachers who are long remembered, well after the lessons that they taught.

Actions of teachers were what the students describe as characteristics that made them feel valuable and respected. Many of the students told stories of how a teacher had understood their feelings, respected them for who they were, and demonstrated an open, friendly, acceptance of where they, the students, were grounded emotionally, physically, and spiritually. One student talked about losing a loved one. In one instance, a teacher volunteered to "listen" if he/she needed someone to talk to, and to quote the student, "the teacher made me feel like I was important". Demonstrating caring, understanding, respect, friendliness, and attention to students are characteristics that students deem as favorable in a teacher. Many of the students suggested that they had a favorite teacher. In an effort to obtain approval from, or please this teacher, the students worked hard, and in turn, that effort earned higher grades. One student remarked, "yes, I work harder for teachers [who have a positive relationship with me] because it's easier to; otherwise you feel like you're letting them down." Other students indicated that they worked harder and obtained higher grades because their teachers, encouraged them, gave them positive feedback, and believed in them. All are attributes of creating positive relations, supporting the notion that most students achieve higher grades when they are involved in positive student-teacher relationships.

The personal interviews with the high school students confirmed the idea that attendance in a particular class is directly related to the relationship that is developed between the teacher and the student. Overwhelmingly, the students suggested that if they liked the teacher they went to class. "Liked" could more than likely be assumed to mean that they had a good relationship with the teacher. Since the teacher has the ability to affect peer problems, help with feelings of inadequacy, and enhance the quality.

**Keywords:**

School management level, development of students' speech, influence of the head of the class to the relationship between teachers and parents, globalization, modern teaching technologies, teacher-student relations, interactivity, traditional character

# **The Factors that Play Role in Academic Resilience of Academicians (A Case of Ankara University Faculty of Educational Sciences)**

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In academic life, it is possible for every student to experience different obstacles, hardships and setbacks. While some of students fail to get through these difficulties, some of them do success. In literature, these kind of students who have academic success despite of several obstacles that prevent other students from the same success are called “academic resilient” students (Morales and Trotman, 2004). Academic resilient students are able to get positive results in spite of negative conditions and backgrounds. Academic resilient students are also motivated to get higher education and willing to participate in activities in school (Alva, 1991).

The risk factors that most of students experienced in academic life are various. Some of these factors are living with single parent, poverty, a lack of parental attention, poor nutrition, having chronic illness or distressing environments (Hanson, Austin and Lee-Bayha, 2003; Masten, 1994). Sustaining academic success in the presence of stated risk factors is remarkable. For this reason, it is very worthwhile to study on academic resilient students and to investigate protective factors that help them to overcome risk factors. Protective factors are the resources which reduce and lighten the effects of risk factors (Masten and Tellegen, 2012).

Studies focusing on protective factors of academic resilient students provide beneficial information especially for students being unable to be successful under the same risk factors. In literature, studies investigated the role of high expectations, inspirational comments, social interaction, supportive activities in schools and extracurricular program, teacher and principal support and found the positive relationship between these protective factors and academic resilience (Gizir, 2004; Dinçer and Oral, 2010; Wu, Tsang and Ming, 2012). Furthermore, according to results of some other research studies revealed that positive attitudes towards school, optimism about future, being goal-oriented developed academic resilience (Er, 2009; Fallon, 2010; Weaver, 2009).

It can be seen that especially the qualitative studies provide great amount of information about academic resilience. However, there is no qualitative study in Turkish literature about this context, although the amount of academic resilient students in Turkey is very high (OECD, 2014).

There are many life-lessons to be learned from academicians who are the key factors of education, especially the ones who have had risk factors in their life and became academic resilient. To reveal these life-lessons from academic resilient academicians would be precious and contributing for literature, researchers and educators. For this purpose, this study tried to

answer these questions: (i) What were the risk factors of academicians?; (ii) What were internal and external protective factors of academicians?

### **Method**

Qualitative study was employed as the research method in this study, since qualitative methods offer an effective way of sustaining detailed and rich information for researchers. For this purpose, the semi-structured interviews were conducted with academicians in Ankara University, Educational Sciences Faculty. Eligibility criteria required academicians to have had a risk factor in their life. The academicians were also selected on the basis of their title and years of experience to sustain variety.

In order to conduct interviews, an interview guide was prepared by authors. The questions in the interview guide for this study were linked to risk factors, internal and external protective factors. All interviews conducted face-to-face and took approximately 20-30 minutes. The data was recorded on a digital audio recorder to get cautions for reliability and not to lose any data by permissions of participants.

Content analysis was used to analyze collected data. Content analysis is a scientific approach examining written and other materials by using a systematic categorization (Tavşancıl and Aslan, 2001). The process of categorizations was done by taking consideration the theoretical background of academic resilience.

### **Findings, Conclusions and Suggestions.**

The findings were reported by taking into account of formed themes and using the quotations defining themes clearly. According to the findings, mainly risk factors which academic resilient academicians had experienced were poverty, negative environmental conditions. On the other hand, this study revealed that internal factors such as self-esteem, decisiveness, curiosity and external factors such as family support, qualified teachers, peer relations helped them to overcome their risk factors. Suggestions were reported for educators, future research according to results of this study in the full text form.

**Keywords:** Academic resilience, academicians, protective factors, risk factors.

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## **Need for Closure, Epistemological Beliefs and Identity Styles among Emerging Adults**

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Identity development is important developmental task in adolescence. Since Erikson (1968) introduced identity development theory several identity formation models were proposed. One of them is Berzonsky's social-cognitive identity model. Berzonsky (1992) developed an identity formation model which involves social-cognitive processes. According to social-cognitive model each identity styles involve different social-cognitive processes. In this model, individuals use different strategies dealing with problem solving, decision making and identity topics. Berzonsky (1992, 2007) proposed three identity-processing orientations: informational, normative, and diffuse-avoidant.

Individuals with normative style consider expectations and desires of their families or important people in their societies. Normative individuals are closed to information that may threat their values and beliefs. These individuals evaluate themselves considering others and use other oriented problem solving. Individuals with information style actively seek out information related to self before making decision about identity. These individuals seek out and evaluate information while considering identity issues. An information-oriented style is positively related to openness to new ideas, values and new experiences. Individuals with a diffuse-avoidant style avoid personal problem and identity-related issues and postpone their decisions (Berzonsky, 1992, 2007).

Several variables effect identity styles. In the present study we examined two cognitive processes. These are need for closure and epistemological beliefs.

Need for closure describe an individual's desire for a firm answer to a question and an aversion toward ambiguity. The term "need" denotes a motivated tendency to seek out information (Kruglanski, 1994). Kruglanski (1993, 1994) asserted that some people have high level of need for closure. The most important dimension of need for closure is closed mindedness. Closed mindedness leads to being closed to new ideas and thoughts. Kruglanski (1994) proposed that individuals with high closed mindedness have motivation called as need for closure during processing and evaluating of information. Individuals with high need for closure immediately want to clear answer instead of uncertainty while facing new issue. These individuals don't like both new information and also contrary information with their existence information. A need for closure is not a tendency which people use only in particular circumstances on contrary, it is a tendency which people use in all circumstances in

order to protect and develop their self. Individuals who have high level need for closure want to predictability and prefer order and structure when they encounter with new information and situation.

Epistemological beliefs are individuals' ideas about what knowledge is and subjective beliefs about how to knowing and learning take place. These beliefs effect that how people approach and deal with the topic which they will learn in the future. In recent years, there is growing interest about university students' epistemological beliefs among educators. Because, a lot of studies (Paulsen & Wells,1998; Rodriguez, & Cano, 2007) revealed that epistemological beliefs that accepted as area of individual differences have important effect on the processes of learning and teaching.

Although identity formation is crucial developmental task during emerging adulthood, the role of need for closure and epistemological beliefs in the identity development is not well understood. Thus, in the present study we aimed to examine whether need for closure and epistemological beliefs predict identity styles during emerging adulthood by using a structural equation model.

## **Method**

### **Participants**

Participants consisted of 310 (54.8 % females) students aged between 18 and 23 (mean age 19.21, SD: 2.37) from Aksaray and Kırıkkale universities.

### **Measures**

**Personal Data Form:** Personal data form was used to obtain data on demographical features of the participants such as age and gender.

**Identity Style Inventory:** In order to measure identity styles, Identity Style Inventory developed by Bersonsky (1992) and adapted into Turkish by Derelioglu and Demir (2007) was used. Items can be respondent on a 5 point scale, ranging from 5 points to 1 point.

**The Need for Closure Scale:** In order to measure need for closure, the Need for Closure Scale developed by Kruglanski (1994) and adapted into Turkish by Atak (2014) was used. Items can be respondent on a 5 point scale, ranging from 5 points to 1 point.

**Epistemological Beliefs Scale:** In order to measure epistemological beliefs, Epistemological Beliefs Scale developed by Schomme (1990) and adapted into Turkish by Deryakulu and Büyüköztürk (2005) was used. Items can be respondent on a 5 point scale, ranging from 5 points to 1 point.

### **Analysis**

To determine relations between variables Pearson Correlation was used. Structural equation model was employed to test the moderating role of the need for closure and epistemological beliefs on identity styles.

### **Findings And Conclusion**

The preliminary analyses showed that the full model linking epistemological beliefs, need for closure and identity styles fitted the data well, Overall, we found that epistemological beliefs are directly related to need for closure and identity styles and need for closure is directly related to emerging adult's identity styles.

In conclusion, the study revealed that need for closure and epitemological beliefs are important factors in the identity formation in emerging adulthood.

**Keywords:** Need for Closure, Epistemological Beliefs, Identity

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# **Investigating Rejected Students' Behaviours' Effects on the Classroom Atmosphere and Teachers' Approaches to these students**

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While people like social acceptance, they do not like social rejection. Unlike grownups, social rejection can be quite challenging for children in terms of social and psychological aspects and may cause problems such as loneliness, academic failure, and behaviour disorders (Harrist & Bradley, 2003). Studies show that socially rejected students can demonstrate undesirable classroom behaviours more frequently (Coie, Dodge, & Kupersmidt, 1990). Rejected students are reported to be problematic in terms of academic and social aspects, and thus seen in the risk group (Asher, 1990). Creasey and Hesson-McInnis (2001) state that rejected individuals experience the feeling of worthlessness. Being accepted is of great importance for individuals so that they can develop positive sense of self. Harris (2009) reports rejection reduces individuals' positive social behaviours and self-control and increases aggression. Therefore, teachers' approach to socially rejected students is of great importance.

## **Purpose**

The purpose of this study is to investigate general classroom behaviours of students who experience social rejection, the effects of these undesirable behaviours on the classroom atmosphere, and the methods teachers use for these students. In this regard, the study aims to find answers to the following questions:

1. What are the classroom behaviours of students who experience social rejection?
2. What are the undesirable classroom behaviours of students who experience social rejection?
3. What are the effects of socially rejected students' undesirable classroom behaviours on the classroom environment?
4. What are the methods teachers use to cope with the students who experience social rejection?

## **Method**

This qualitative study was conducted in two schools located in the city of Hatay, in the 2014-2015 education year. The data were collected via interviews from 13 teachers (five male and eight female) and observations on four (two female, two male) students. The teachers to be interviewed were identified according to criterion sampling method. The criteria were teachers' having a student in their class who experience social rejection, having at least three year experience in teaching, and being volunteer to participate in the study. The students to be observed were chosen using sociometry technique. The data collected from semi-structured interviews were analysed using content analysis techniques. Reliability and the validity of the study were enhanced by reliability between the coders, detailed explanations of the steps in

the process, and presentation of the results in original utterances, without including any comments.

### **Findings and Conclusion**

Analysis of the data obtained from the teachers' interviews demonstrated two themes regarding the socially rejected students' classroom behaviours: "participation in the lesson" and "psycho-social environment". Findings show that frequently demonstrated behaviours of the students who experience social rejection included trying to answer questions they do not know, walking around aimlessly, not doing homework, asking questions unrelated to the lesson, and making other people do homework for them. As for the behaviours frequently demonstrated about the psycho-social environment, they included taking no responsibilities, trying to attract attention, teasing friends, being silent, using physical violence, violating the rules, sitting alone, sitting next to other students without permission, and scribbling on others' homework.

Some of the negative behaviours of these students on learning environments are distracting the attention of the class, preventing the flow of the lesson, being a negative role model for other students, preventing other students' listening to the lesson, disturbing the classroom peace, and causing tension between teachers and students. As for the teachers' approach to these students, they used such techniques as ignoring, warning, giving responsibilities, rewarding/acknowledging, meeting one to one, talking with the parents more frequently than the techniques such as giving a break, tranquilizing, providing psychological counselling or directing to RAM.

Observation results on the behaviours of socially rejected students were collected under the themes "participation in the lesson" and "psycho-social environment". According to observation results, socially rejected male students tended to demonstrate such behaviours as trying to answer the questions that they do not know, walking around aimlessly, talking about the things that are not related to the lesson, distracting the attention of the class, and dealing with objects that are not related to the lesson more frequently. As for the girls, they demonstrated behaviours such as not listening to the lesson, dealing with objects that are not related to the lesson, not acting with the group, and not wanting to participate in the lesson.

### **Suggestions**

Findings show that students who experience social rejection frequently tend to demonstrate behaviours which can have negative effects on the learning-teaching processes, both for themselves and for the whole class. In this regard, teachers should be trained about the approaches and intervention methods for students who experience social rejection, and the schools should organize intervention programs for the students who are socially rejected.

**Keywords:** Social Rejection, Classroom Management, Methods for Rejected Students

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# The Development of Hypothetico-Creative Reasoning Skills' Inventory

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The aim of this research is to develop hypothetico-creative reasoning skills inventory based on the inner dimensions of hypothetico-predictive reasoning skills. Hypothetico-Creative reasoning skills can be defines as a reasoning skill based on six inner dimension of Lawson's hypothetico-predictive reasoning skills which are hypothetic reasoning, proportional reasoning, controlling variables, probabilistic reasoning, correlational reasoning and combinational reasoning (Lawson, 1995: 61-62), and six outer dimensions of creative thinking skills based on the literature research which are analogical thinking, convergent thinking, divergent thinking, metaphorical thinking, vertical thinking and lateral thinking through data-information-knowledge-episteme conversion and extraction processes in order to construct epistemological beliefs (briefly episteme) about scientific or general concepts (Duran, 2014: 91-92). The target population of this study consists of Ondokuz Mayıs University Education Faculty students. In this study maximum variation technique which is among the purposeful sampling techniques was used to choose the target population. In this sampling technique the aim is to find the similarities among diverse cases rather than making generalization about those cases and hence reckon with the different aspects of the problem in different dimensions (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2009: 89). The population of this research consists of the students in 2013-2014 education period in Ondokuz Mayıs University Education Faculty in the department of 2<sup>nd</sup> grade of German Language teacher training (23), 4<sup>th</sup> grade of French Language Teacher Training (21), 4<sup>th</sup> grade of German Language Teacher Training (53), 4<sup>th</sup> grade of Turkish Language Teacher Training (18), 2<sup>nd</sup> grade of Elementary School Teacher Training (24), 2<sup>nd</sup> grade of Elementary School Teacher Training (31), 2<sup>nd</sup> grade of Counseling and Guidance Department (76), 4<sup>th</sup> grade of Counseling and Guidance Department, 3<sup>rd</sup> grade of High School Physics Teacher Training (15), 3<sup>rd</sup> grade of Science Teacher Training (31), 3<sup>rd</sup> grade of Preschool Teacher Training (29), 2<sup>nd</sup> grade of the Department of Special Education (38) which sum up in total to 400 students. In this study, the questionnaire of hypothetico-creative reasoning skills inventory was created based on the six dimensions of hypothetico-predictive reasoning skills and some general mixed questions about creative thinking skills. In the process of preparation of the questionnaire, three students from Counseling and Guidance department was chosen in order to check the items both grammatically and semantically. In this process, faculty members from different departments {research assistants (3), professor (1), associative professors (2)} also checked the general structure of the questionnaire. Then, the questionnaire consisting from 83 items produced on the basis of six dimensions of hypothetico-deductive reasoning skills were conducted to the group of students (370) who are from different departments. At the end of factor analysis, the items which are lower than .35 were eliminated and the new questionnaire which has 37 items was produced. In order to ensure the content validity, the questionnaire which has 37 items are used with problem solving scale developed by Ge (2001) and translated in Turkish by Çoşkun (2004) are conducted to 228 students from different departments. To find the correlations between problem solving scale and hypothetico-creative reasoning inventory, the pearson moment correlation coefficient was calculated and found to be .0355 which implied there was positively lowest level correlation between those two measuring tools. After the this

questionnaire was conducted to 400 students who were different departments the inventory which had 23 items based on five factors and had the value of Cronbach's Alpha as .89 was produced by eliminating the questions which were lower than .35 in the sample of group consisting of 682 individuals. In the confirmatory factor analysis by doing required edits through using AMOS, in the DFA result, the value of  $\chi^2/sd$  was found to be as 1,78, the value of CFI was found to be as .90, the value of GFI was found to be as .87 and the value of KMSEA was found to be as .056 hereby the confirmatory factory analysis was done in the sample of groups consisting of 282 individuals and was consisted with the predicted structure of the inventory. Furthermore, the internal structure of the inventory was also thought to be consistent with the scientific epistemological beliefs scale developed by Elder (1999) translated by Acat, Tüken and Karadağ (2010) and Lemire's (2001) Learning Style Inventory through the the analysis of computing hypothesis (Duran, 2014). As a result the hypothetico-creative reasoning skills inventory was developed by doing exploratory and confirmatory factor analysis. The factors of the inventory has five dimensions which is similar with the number of the dimensions of hypothetico-predictive reasoning skills as predicted. As for the subsequent researches, the outer dimension of the hypothetico-creative reasoning skills can be used forboth quantitative and qualitative studies

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# The Effect of Communication Skills Education on Student Empathy Throughout Medical School

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Empathy is a cognitive attribute that involves an ability to understand the patient's inner experiences and perspective and a capability to communicate this understanding (Hojat et al., 2002). Empathy promotes patient and physician satisfaction and may improve patient outcomes, which shows that it is important to promote empathy during medical education. The aim of this study was to examine the effect of communication skills education to student empathy in Ankara University School of Medicine (AUSM).

**Materials and Methods:** Study participants were medical students at AUSM from 1st through 5<sup>th</sup> year during 2013-2014. The students voluntarily completed the Turkish Jefferson Scale of Physician Empathy-Student Version (JSPE-S) and were not compensated for their participation.

The AUSM curriculum which runs a 6-year program comprises 3 years of preclinical work followed by 3 years of clinical work (2 years of clerkships and one year's internship). Communication skills classes promoted in 2<sup>nd</sup> and 3<sup>rd</sup> years include empathy, active listening, I-messages, and no-lose conflict resolution (only in 3<sup>rd</sup> years). Sessions include 4 hours of small group interactive teaching followed by 2 hours of role-play in which students write reflective notes from the patient's point of view where his/her friend try to display a competent physician in communication skills and one type-recorded standardized patient interview, 2 hours of peer-assessment with videos and then one more standardized patient (SP) interview in each year. After each SP interviews both SPs and faculty give oral feedback to the students about their performances. There is no constructed "communication skills training" during clerkships and internship.

In this study, the student version (S-Version) of Jefferson Scale of Physician Empathy (JSPE-S) was used to measure student empathy, which was developed to measure medical students' attitudes toward empathic physician-patient engagement in the context of patient care. The scale includes 20 items (10 items positively worded and 10 items negatively worded) answered on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree), and higher scores show higher empathic consistency. Psychometric properties of this scale have been previously reported (Gönüllü and Öztuna, 2012). The scale has three subscales: "perspective taking", "compassionate care" and "standing in the patient's shoes".

This study utilized a cross-sectional design involving 1257 medical students (% 53.7 female, % 46.3 male) at AUSM. Kruskal-Wallis variance analysis was used to compare the sub-scale scores in terms of year and the post-hoc test for Kruskal-Wallis variance analysis was used to perform pairwise comparisons. Mean, standard deviation (SD) [median (minimum-maximum)] was used as descriptive statistics.  $p < 0.05$  was considered as statistically significant. Data were analyzed using the Statistical Package for the Social Sciences (SPSS 11.5).

**Results:** We assessed the year differences for the sub-scale scores, and found that there were statistically significant year differences in terms of “perspective taking”, “compassionate care” and “standing in the patient’s shoes” ( $p < 0.001$ ,  $p < 0.001$  and  $p = 0.001$  respectively). Post-hoc tests showed that; for “perspective taking”, there were differences between 1<sup>st</sup> - 2<sup>nd</sup>, 1<sup>st</sup> - 4<sup>th</sup>, 1<sup>st</sup> - 5<sup>th</sup>, 2<sup>nd</sup>-3<sup>rd</sup>, 2<sup>nd</sup>-4<sup>th</sup>, 2<sup>nd</sup>-5<sup>th</sup> and 3<sup>rd</sup>-5<sup>th</sup> years, for “compassionate care” there were differences between 1<sup>st</sup> - 2<sup>nd</sup>, 1<sup>st</sup> - 5<sup>th</sup>, 2<sup>nd</sup>-3<sup>rd</sup>, 2<sup>nd</sup>-4<sup>th</sup>, 2<sup>nd</sup>-5<sup>th</sup> and 3<sup>rd</sup>-5<sup>th</sup>, 4<sup>th</sup>-5<sup>th</sup> years, and for “standing in the patient’s shoes” there were differences between 1<sup>st</sup>- 3<sup>rd</sup>, 2<sup>nd</sup>-3<sup>rd</sup> and 3<sup>rd</sup>-5<sup>th</sup> years. Empathy scores for “perspective taking”, and “compassionate care” were higher for 2<sup>nd</sup> year than 1<sup>st</sup> year and empathy scores for “standing in the patient’s shoes” were higher for 5<sup>th</sup> year than 3<sup>rd</sup> year. All the other statistically significant year differences were lower than the other.

**Conclusion:** In fostering patient-centered care, empathy is an essential skill for physicians and it can be taught during undergraduate medical education (Batt-Rawden et al, 2013). We examined the effect of the communication skills education given in AUSM during preclinical years. According to our results the 2<sup>nd</sup> year students` JSPE scores increased significantly for “perspective taking”, and “compassionate care” after the communication skills education. On the other hand even though there is a constructed communication skills education in 3<sup>rd</sup> year in AUSM, the 3<sup>rd</sup> year students` JSPE scores decreased significantly for the three sub-scales. This result was not expected and further research is needed to investigate the causes of this decline and we should make profound changes in our communication skills education, and develop an appropriate program for 3<sup>rd</sup> year.

Our results also showed that during clerkships the scores decreased gradually as the years get higher. Many of the studies about empathy show that empathy declines during medical school (Hojat et al., 2004; Newton et al., 2008). Our study confirms prior research on physician empathy by examining empathy scores over the medical education years of the students. These findings suggest that there is an erosion of empathy during medical education and further studies should be done to find out the reasons that affect the medical students’ visions of the importance of human interactions and empathy in patient encounters.

Our study was limited by lack of long –term follow up, but we started a longitudinal cohort study last year. Multicenter studies are also needed. The other limitation is our study focused on self-reported empathy and not behaviors.

**Keywords:** Communication Skills, Empathy, Undergraduate medical education.

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# **The Specificity of the Educational Process of a Child in a Foster Care Environment in the Psychological Perspective**

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The purpose of this presentation is to present the psychological knowledge on the specificity of the educational process of a child in foster families in Poland and show the directions of the work taken up within the international project Family Learning in Foster Families (FALEFOS) aimed at improving life conditions of foster families as well as development and educational opportunities of the children.

Since the contemporary Polish society is more and more divided into the rich and the poor, the children's diverse situation also becomes conspicuous. On the one hand, 21<sup>st</sup> century ascribes a high value to a child and childhood, which results in numerous actions taken by adult people to improve life conditions and create good development prospects for children, e.g. appointing the ombudsman for children, social campaigns against violence toward children, access to education (Wałęcka-Matyja, 2013). On the other hand, there is an increasing number of dysfunctional families, whose children are threatened by poverty and social exclusion (Kalus, 2014; Wałęcka-Matyja, 2012).

The phenomenon of child neglect in natural families, consisting in lack of care for them, lack of knowledge about their needs as well as lack of resources to satisfy the needs, brings about the necessity to look for different forms of support. One of them is the foster care system (Ruszkowska, 2013; Haight et al. 2001; Kufeldt, 1995). Foster parents are obliged to take care of the integral education of a child entrusted to them, taking actions related to their physical, mental, social and cultural development (Łuczyński, 2008). As it results from the literature review, the parents who notice difficulties often say that their foster child causes more than one problem (Ruszkowska, 2013). What does the specificity of the educational process of a child in a foster family consist in and what difficulties are faced by the guardians?

It must be realized that children in foster families carry a heavy load of difficult experience since the functioning of some natural families causes trauma in them. These children demonstrate numerous disorders in mental functioning, which is a serious obstacle for their foster parents to play the role of educators. The most frequently mentioned ones are: emotional burdens, lack of a sense of security, identity problems, problems with a sense of belonging, experiencing a loyalty conflict, different values, traditions, behavior principles, culture within the two family systems (Cattabeni, 2008; Chapman et al., 2004).

The literature of the subject shows differences in the number of candidates trained to be foster parents and emphasizes the conviction that the child care system should be continuously improved (Chapman et al., 2004). Due to the fact that child care in the form of a foster family is especially important for satisfying the needs of an abandoned child, it is worth paying attention to the issue of educating these families and their cooperation with both social workers and natural families. The foster family education areas that deserve special attention are related to the consequences of negligence and placing a child in their early ontogenesis in a foster family, the significance and dynamics of the relationships of attachment between

children and their guardians, the guardian's awareness of different reactions of the child to stress, the problems of parent roles and care provided by kin (Mickiewicz, 2013; Rżysko, 2010; Cattabeni, 2008; Kolankiewicz, 2007; Chapman et al., 2004).

Summing up, the idea of the FALEFOS project focused on highlighting the importance of the family learning process. It has been indicated that it is a common tendency to restrict the understanding of the family learning process to supporting formal education of children. But there is more to it – the awareness, reflection, informal learning processes and related values, relationships and identities within different conditions. Considering the above, it seems highly advisable to continue the scientific work on the improvement and creation of such conditions that would allow foster parents to perform their educational tasks in a full and correct way.

**Keywords:** foster family, the educational process, disorders, disorders of internalization, family learning.

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**THEME 6:**  
**Perspectives on Guidance and Counseling**

# Peacemaker Students' Perceptions of The Peacemaking Process \*

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The purpose of this research was to reveal peacemaker students' perceptions related to experiences gained through peacemaking process. This research was carried out by the participation of ninth grade students of an Anatolian High School located in the city center of Aydın during 2013-2014 academic year. In the first phase of two-phase study, peace education training was provided to peacemaker students (3 girls, 3 boys, and 6 students in total in each classroom) selected by their classmates through fall semester. In the school in which eight ninth-grade sections existed, a total of 48 peacemakers were trained. In the second phase of the study, students attended the peace education program were assigned as peacemakers in the school, facilitated negotiation process in student to student conflicts, and helped disputants to reach a constructive and peaceful resolution through spring semester. After the two-phase study was completed in spring term in the last week of May, in order to acquire more in-depth data related to peacemaker students' personal experiences, "semi-structured interview technique" was used as a method of qualitative research (Yıldırım & Şimşek, 2013). The research, in which criterion sampling technique was used as a one of purposeful sampling methods, were carried out with a total of 25 students (girls  $n=16$ ; boys  $n=9$ ) through semi-structured interviews. In the analysis of qualitative data obtained through Interview Form developed by researchers, content analysis technique was used. All the data were coded twice a week by the same investigator and intra-rater reliability level of 91.89% was achieved (Miles & Huberman, 1994, p. 64). Research results indicated that students felt happy to become a peacemaker and their self-esteem and self-confidence increased; they considered the most admirable aspects of peacemaking as preventing fights, making peace among and between people, and personal development/transformation; they also stated that their behaviors had transformed in the positive way; their problem solving and communication skills were improved; attitudes towards violence were decreased; peacemakers said that they used peacemaking knowledge and skills out of school settings more probably at home and in their peer groups; they also emphasized that as a peacemaker in conflict situations they were able to prevent fights and make peace between disputants. All these findings in the current research confirmed the findings of other researches by Turkish (e.g., Güloğlu, 2011; Gülkökan, 2011; Kaçmaz, 2011; Sağkal, 2011; Türk, 2013; Türnüklü, 2011; Türnüklü et al., 2009) and western scholars (e.g., Hessler, Hollis, & Crowe, 1998; Johnson & Johnson, 2002). One of the strengths of this research was that by using semi-structured interview form, investigating peacemaking process from the eyes' of peacemaker

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students, obtaining more in-depth data, analyzing, reporting, and discussing these results in the light of the literature. On the other hand, the most important limitations of the study were qualities of peace education program developed and implemented by the researchers, qualities measured by semi-structured interview form, and features related to sample group like age, education, and socio-economic level. In future research, effects of peacemaking applications conducted in schools can be evaluated from the perspectives of different member groups of school system like school counselors, administrators, and parents.

**Keywords:** Peace, peace education, peacemaking, peacemaker perspectives

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## Examination of “Possible Field” for Young People in Different Education and Orientation Systems

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In such educational/professional orientations as choosing an educational field, a department, a program or a career plan, evaluation of preferences during the transition to an upper education level, determination of education level to be maintained, some forms of inequality become involved in from certain perspectives and create a problem of social equality. Inequalities becoming involved in the determination of young people's educational orientations, educational lines are not only related with individual capacities and limitations, inherited attributes, but also with factors surrounding an individual. Developmental status of the education system of a country is one of these factors. Of many individual and environmental factors, a country's education system and educational/professional orientation structures included in it create "capacity enhancing advantages" and "inhibitors in capacity development" on young people.

In developing countries like Turkey, since education system has not completed its structuring process, changes very frequently and is away from being stability and consistency, structures which are in effect in a country might be sources of inequity. In western societies, the existence of such rights as equality of opportunity, free compulsory education, orientation-participation in the decision to separate into fields, right to change field, opportunity to repeat a class to increase school success at a critical orientation stage, ability to apply to a transition possibility in order to enter a selected program frequently provides “capacity enhancing advantages”.

Amartya Sen's (2009) theory of social equity creates a very suitable basis for those who are vulnerable from certain aspects to be able to use environmental resources and question "the capability of orienting themselves". Amartya Sen defines social equity as an individual's choosing him/herself an education project which s/he sees valuable on reasonable grounds and as the "real" freedom which h/she has about maintaining their life styles. With the perspective of social equity and equality, individuals question the "possible field", that is to say, real possibilities which an individual has about the matters of taking action and involving in the development of social norms.

**Purpose:** In this study, it was aimed to investigate into the subject of real freedom (*capabilities to orient*) which young people from different countries have in order to reach a career which they really value. Within this framework, an answer was sought to this question: To what extent do young people living under unjust treatment conditions in different countries benefit from current rights included in their countries' educational systems to expand their possible fields with the aim of realizing their educational projects and reducing their victimhood?

In four different countries (Turkey, Iran, France and Canada (Quebec), it was investigated into possible fields of young people maintaining their education under unjust treatment conditions in terms of the possibility of transition to higher education within the current educational/vocational orientation structures of their countries. The comparison of four countries was realized in two stages. 1/ At macro level, through the description of the structures orienting student flow within the education and orientation system of every country, an attempt was made to understand legal resources/rights which young people of the countries can activate in the systems in which they are. 2/ At micro level, analyses were made into positive and/or negative transformation dynamic effects of legal/official possibilities put into effect in the education and orientation systems of four countries on young people's educational progression process.

**Method:** In this study aiming to examine the variables of a complex phenomenon like individual- context relationship in detail, the qualitative approach and biographic interview technique were used (Yıldırım and Şimşek,2008; Bonvin & Farvaque, 2007). Reports taken from one young person in each country about their own educational development processes were examined: Ilke from Turkey, Abad from Iran, Johan from France and Ariane from Quebec.

With the longitudinal analysis made over four biographic stories, it was aimed to reveal the young people's ways of evaluating their choices and the resources of which they made use for this purpose, key stages in their progression, the context and dynamics in which this process took place. The comparative analysis of the educational/vocational orientation systems and biographic education stories made it possible to understand the critical turning points of the educational process and personal and social transformation factors having a determinant effect on the real freedom which the young people have in transition to higher education.

**Findings:** In terms of real possibilities and capacity enhancing potentials which the education systems provide to their young people, each has advantageous or disadvantageous aspects specific to them. In Turkey and Iran, the existence of elimination and hierarchical elements determining the educational fate of the young predominates. In France and Quebec, it is observed that the educational/vocational orientation structures play a very important role in creating an equilibrium with the aim of increasing the real possibilities of the young against some negative transformation factors.

**Suggestions:** Biographic stories reveal the net effect appearing in different forms in every case in detail in the process bringing to higher education of determinant stages in the education system and environmental factors playing a role in these stages, supporting or hindering the freedom of the young and their families to benefit from current resources. Multi-dimensional studies examining dynamic interactions included in the structural context orienting the formation of young people's education within time by adapting to A. Sen's theory are needed.

**Keywords:** Amartya Sen's Theory of Social Equity, educational / vocational orientation biographical interview

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# **The Effects of Peace Education Program on Students' Violence Tendencies and Social Problem Solving Skills\***

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The purpose of this research was to examine the effects of Peace Education Program on the ninth grade students' violence tendencies and social problem solving skills. In the research, a pretest/posttest/follow-up test, quasi-experimental design was used. The research was conducted in Anatolian High Schools located in the center of a western city of Turkey, where generally middle SES families' children receive education, and interpersonal conflicts occur frequently among and between students. The study group included a total of 142 students (girls  $n=72$ , %51; boys  $n=70$ , %49); 46 students (girls  $n=24$ , %52; boys  $n=22$ , %48) in experimental, 48 students (girls  $n=24$ , %50; boys  $n=24$ , %50) in control, and 48 students (girls  $n=24$ , %50; boys  $n=24$ , %50) in placebo group. Participants' ages ranged between 14 and 16 ( $\bar{X} = 14.70$ ,  $sd = .53$ ). The Violence Tendency Scale (Haskan & Yıldırım, 2012) and The Social Problem Solving Inventory-Revised (Eskin & Aycan, 2009) were used as measurement instruments. After pretests were applied to experimental, control, and placebo groups, 16-session peace education program were provided to students in experimental group within a 13-week period during fall semester of 2013-2014 academic year. In parallel to experimental treatments, participants assigned to placebo group received group guidance activities related to effective studying techniques (Kaya Zengin, 2009) and coping with exam anxiety (Özdemir & Ergene, 2005). During that time, no treatment was given to control group. After the treatment process was completed, posttests were administered to all groups. Follow-up tests were given 8 weeks after the posttest measurements had been taken. In this research including two dependent variables, one independent variable, two covariates, and three assessment time points, repeated measures one-way multivariate analysis of covariance (RM-MANCOVA) technique was used (Tabachnick & Fidell, 2007). As an independent variable of this study, peace education program was developed by researchers to help ninth grade students to gain interpersonal conflict resolution skills. Training program includes 16 sessions which last 40 minutes each. Both for providing manual for current researchers and other researchers who may want to use this program in future researches, a "Peace Education Program: Trainer Manual" and a "Peace Education Program: Student Activity Book" were prepared. Peace education program was developed based on a thorough review of the literature (eg., Danesh & Clarke-Habibi, 2007; Johnson & Johnson, 1995a, 1995b; Libresco & Balantic, 2006; Sağkal, 2011; Türnüklü, Kaçmaz, İkiz, & Balcı, 2009; UNESCO, UNHCR, & INEE, 2005). Research findings indicated that compared to control and placebo groups,

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students' violence tendencies significantly decreased and social problem solving skills significantly increased in favor of experimental group. Overall, the present results empirically confirm that in order to transform a culture of violence into a culture of peace, children must be provided with necessary peacemaking skills from early ages. It should also be emphasized that methodological limitations related to sample group and experimental design need to be taken into account when interpreting these findings.

**Keywords:** Peace, peace education, violence tendency, social problem solving skills

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# Frequencies of Bullying among Adolescents Staying in Orphanages Houses in Turkey<sup>4</sup>

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In recent years, there have been a growing number of researches conducted in Turkey in order to understand the prevalence of bullying and victimization. However, most of this research was conducted in primary, middle, or high schools (Ayas & Pişkin, 2011; Cheraghi & Pişkin, 2011; Dölek, 2002; Gokler, 2007; Kapçı, 2004; Pekel, 2004; Pişkin, 2010). No research was found that investigates the prevalence of bully-victims staying in orphanages houses.

Therefore the main objective of this research is to assess the frequency and types of victim/bully behavior among adolescents staying in orphanage houses, in Turkey. In addition, different types of bullying behaviors (physical, verbal, isolation, rumor spreading, and attacks on property) are also examined in relation to the sex of the children.

## Methods

### Research Design

A survey research design under descriptive research was adopted in this study, in order to determine the frequency of victim/bully behaviors among children staying in orphanage houses.

### Participants

The sample consisted of 543 adolescents (48,4% males and 51,6% females) drawn from 12 male and 12 female orphanage houses in Istanbul, Ankara, Izmir, Bursa, Balıkesir, Kayseri, Mersin, Kastamonu, Artvin, Erzurum, Malatya, and Şanlıurfa, according to NUTS-1 criteria, in Turkey. The age of the participants ranged from 11 to 18 years.

### Data Collection Tools

The “Bully-Victim Determination Scale - Adolescent Form” developed by Piskin & Ayas (2007) was used. The Scale consisted of two main subscales; one is called “Bullying Scale” and the other “Victimization Scale”.

The Bullying Scale and the Victimization Scale each consisted of 6 factors as follows: Physical, verbal, isolation, rumor spreading, harming properties, and sexual. The sexual subscale was not used in this investigation because of anticipated difficulties in getting permission from the authorities to use it. When the participants’ score increases the bullying and victimization level increases, while when the score is low the bullying and victimization level is low.

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## **Data Analysis Techniques**

Descriptive statistics were computed first. Next, prevalence estimates for being bully and victim were computed for the total sample and then by gender. Analyses of gender were also conducted for specific types of bullying and victimization. Chi-square statistics were then computed comparing the number of frequencies within these categories. An alpha of 0.05 was used to designate statistical significance.

## **Findings**

### **Frequency of Victims**

The results showed that %73,1 of the participants reported to have been victimized physically (hit, kick, push, slap, etc.), followed by 63,4% verbally (insult, calling hurtful and nasty names, etc.). 50,8% reported attack on property, 44,9% isolation, and 44,6% rumor spreading.

In “victim” group, the most frequent type of bullying behavior that males reported was to be subjected in physical bullying (74,8%) followed by verbal bullying (66,3%), attack on property (52,3%), isolation (49,2%), and rumor spreading (48,1%). Although the percentages of females reported to be victimized were slightly lower than the males’, it was still found to be quite high. The results revealed that, similar to males, the most frequent type of bullying behavior that females reported was to be subjected to physical bullying (71,3%) followed by verbal bullying (60,0%), attack on property (49,6%), rumor spreading (41,8%), and isolation (41,1%). This results show that in all types of victimization, males’ percentages were higher than the females’ percentages.

### **Frequency of Bullies**

The results showed that 55,2% of the participants reported to have been bullied physically, followed by 42,7% verbally, 26,2% isolation, 21,9% attack on property, and 16,8% rumor spreading.

With relation to sex differences, in “bullies” group, the most frequent type of bullying behavior that males reported to have been engaged was physical bullying (55,0%), followed by verbal bullying (41,9%), isolation (25,2%), attack on property (25,2%), and rumor spreading (18,2%). Similar to the males, in the females “bullies” group, the most frequent type of bullying that females engaged was also physical bullying (54,9%), followed by verbal (44,0%), isolation (27,3%), attack on property (19,3%), and rumor spreading (15,6%).

These results show that the percentages of bully males were higher than bully females in “attack on property” (males=25,2%; females=19,3%) and “rumor spreading” (males=18,2%; females=15,6%), whereas percentage of bully females found to be higher than the bully males in verbal bullying (females=44,0%; males=41,9%), and isolation (females=27,3%; males=25,2%). However, the percentages of males and females were very close to each other in physical bullying (males= 55,0%; females= 54,9%).

## **Conclusions and Suggestions**

In conclusion, the results of our study indicate that bullying is a substantial problem for males as well as for females staying in orphanage houses, in Turkey. It appears that orphanage houses do not always effectively deal with bullying problems. Accordingly, setting up and developing an intervention programs is an important need for these adolescents for the prevention and reduction of bullying.

**Keywords:** Bullying, Victimization, Frequencies, Orphanage Houses

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# **Counseling Self-efficacy Beliefs Of Counselors Concerning Their Roles at School Context**

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**Purpose** The purpose of this study was to investigate whether there is any significant difference between Counseling Self-Efficacy Beliefs of Counselors working for primary and secondary schools in Ankara in terms of their gender, level of schools where they have been working, their experience in school counselling and programs they had graduated.

**Method** Necessary data for this study were gathered from 317 counselors, of them working for primary schools and secondary schools in Ankara by conducting Turkish form of the School Counselors' SelfEfficacy Scale (SCSS) developed by Bodenhorn & Skaggs (2005) and Turkish Form of 'Counselor Personal Information Form' prepared by Balcı (2014). In order to analyse the data, t- test, Two WayANOVA and Kruskal-Wallis analysis of variance were used. The source of the differences among groups were tested with employing Scheffee test. Turkish form of SCSS consists of 37 items on a five-point Likert type and includes five sub-scales, which are "Personal and Social Development", "Leadership and Assessment", "Career and Academic Development", "Collaboration", and "Cultural Acceptance" sub-scales. For this reason, counselors' counseling self-efficacy were analysed according to these sub-scales and in terms of their gender, level of schools where they have been working, their experience in school counselling and programs they had graduated.

Results of the study indicated that;

1. There is no significant differences among the scores of school counselors working in Ankara about Personal and Social Development sub-scale of School Counselor Self-Efficacy Scale in terms of their gender, level of schools where they have been working, their experience in school counselling, interaction of gender – school level and programs they had graduated.
2. The scores of males are higher than that of females among school counselors working in Ankara and in total the scores of male school counselors are higher than that of female school counselors about Leadership and Assessment sub-scale of School Counselor Self-Efficacy Scale in terms of their gender significantly. Moreover, there is no significant differences among the scores of school counselors in terms of their experience in school counselling and programs they had graduated.
3. There is no significant differences about the scores of school counselors working in Ankara about Career and Academical Development sub-scale of School Counselor SelfEfficacy Scale in terms of their gender, their experience in school counselling and programs they had graduated . Moreover, the scores of those females are higher than that of those males at primary schools and the scores of those males are higher than that of those females at secondary schools females among school counselors in terms of level of schools where they have been working.

4. The scores of males are higher than that of females among school counselors working in Ankara. In addition, no significant differences about the scores among school counselors in terms of experience, level of school where they have been working and programs they had graduated were found about Collaboration sub-scale of School Counselor Self-Efficacy Scale.

5. There is no significant differences about the scores among school counselors working in Ankara in terms of their gender and programs they had graduated; moreover, the scores of school counselors working at primary schools are higher than that of school counselors working at secondary schools in terms of school level; the scores of school counselors with 7-10 years-experience are higher than that of school counselors with below-than-6-yearsexperience and more-than-11-years- experience in terms of their experience about Cultural Acceptance sub-scale of School Counselor Self-Efficacy Scale.

Discussion School Guidance and Counseling Services, which have significant roles and place within student personnel services at schools, are given by school counselors in order to enable any students to develop their capacities in terms of any aspect as fully as possible and enable them to be happier and more productive at personal and environmental level (Yeşilyaprak, 2000). According to Bandura's (1995) social cognitive theory self-efficacy is an important aspect of career performance and preparation. Moreover, Bandura (1995) defined self-efficacy as beliefs about one's own ability to successfully perform a given behavior and stated that it involve "a generative capability in which component cognitive, social, and behavioral skills must be organized into integrated courses of action to serve several purposes". As result of this statement, self-efficacy is a mediating function of behavior and self-efficacy beliefs influence how people think, feel, motivate themselves and act. Those persons with strong self-efficacy beliefs set higher goals for themselves and exhibit stronger commitment, motivation, perseverance, and resiliency toward achieving their goals (Bandura, 1995). In addition, the study of Lent & Hackett, (1987) indicated that there is positive relationship between self-efficacy and work adjustment, job satisfaction, and stress reduction. Self-efficacy has been shown to be an important aspect of successful teaching, counseling, and coping with change and counselor self-efficacy may be a critical factor in counseling performance, adopting transitions, and persistence (Larson & Daniels, 1998). Self-efficacy for school counselors would help in many ways to exhibit stronger commitment, motivation, perseverance, and resiliency toward achieving their goals during professional practice. Furthermore, counseling self-efficacy can be concerned to support the effectiveness of the education process in school counseling services, as well as to provide insight into the relative success of practicing school counselors.

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# **Psychological Counselors' Perceptions about Their Roles and Responsibilities in School Safety**

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Psychological counselors play an important role in interventions toward violence and crime among students. In the 19th National Education Council, it was proposed that the Guidance and Psychological Counseling Services Regulations should be re-regulated in a way to cover the duties and responsibilities of school counselors about the matter of school safety. It is considered that determination of the opinions and requirements of psychological counselors expected to play an important role both in planning interventions toward violence and applying these interventions effectively at school about the matter will contribute to works aiming at school safety. Within this scope, this study aimed to evaluate the perceptions of psychological counselors working in different education stages about their roles and responsibilities in relation to school safety.

## **Method**

### **Research Design/Model**

The study was designed qualitatively. Qualitative study can be defined as a study in which such qualitative data collection methods as observation, interview and document analysis are used and a qualitative process aiming to reveal perceptions and events in a realistic and holistic manner in a natural environment is followed (Yıldırım and Şimşek, 2006).

### **Study Group**

This study was carried out with twelve psychological counselors working in different education stages in the province of Erzurum. 6 of the participants were male and the other 6 were female.

### **Data Collection Tool**

In the study, the opinions of the participant psychological counselors about their roles and responsibilities in relation to school safety were obtained via using the interview form. The interviews were recorded via using a tape recorder.

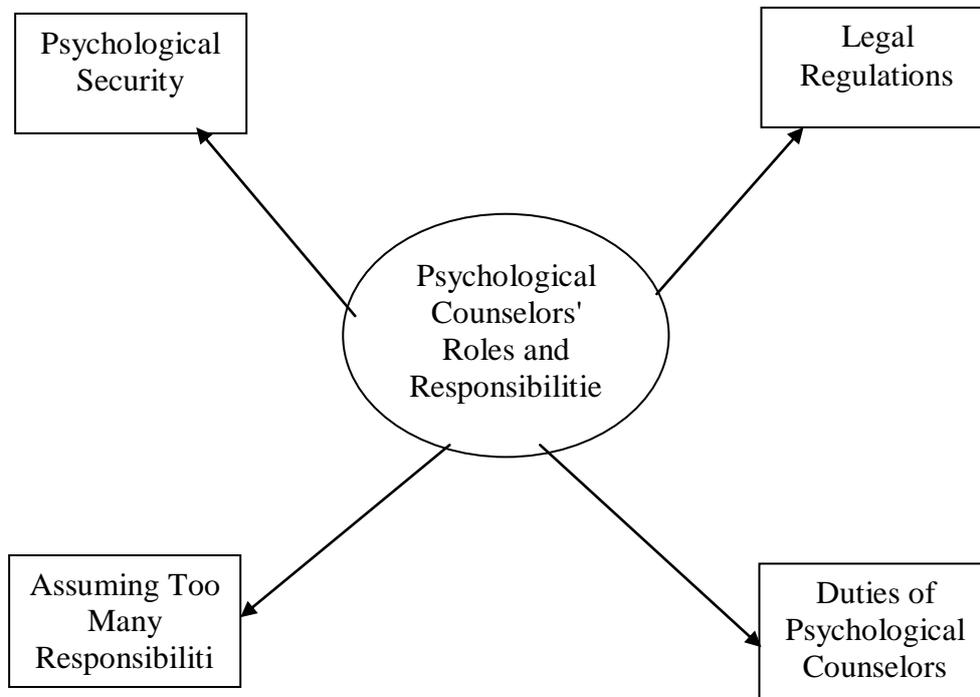
### **Data Analysis**

The interview records were transcribed and analyzed. In the analyses of the data obtained from the psychological counselors, the method of content analysis was employed. In parenthetical coding, the first letter described the initial of the name, the letter next to the first letter described the education stage, the first number described the age of the participants, the letter next to the first number described gender and the last number described the service length of the psychological counselors.

## Findings

### 1. Psychological Counselors' Roles and Responsibilities in relation to School Safety

The opinions of the psychological counselors about their roles and responsibilities in relation to school safety are given below in Figure 1.



**Figure 1. Psychological Counselors' Roles and Responsibilities in relation to School Safety**

The opinions of the psychological counselors about psychological security can be expressed as follows: "*Psychological counselors have an important instructive, awareness-raising role primarily in preventing violence against students, informing them about peer bullying, abuse, neglect, substance abuse, health, nutrition, cleaning, infectious diseases and carrying out preventive and intervening works against problems which put or are likely to put school safety in danger.*" [SO, 23, F, 2]

The opinions of the psychological counselors about legal regulations were as follows: "*If our profession is described as open-ended and our duties and responsibilities are not specified clearly with regulations, the school administration may make us do so many unnecessary works which are irrelevant to our profession. We are already idles in the eye of all the administrators.*" [HL, 28, M, 4]

A psychological counselor's opinion about the duties of psychological counselor was like this: "*It is the psychological counselor that is primarily responsible. A psychological counselor is the person who is responsible for determining and treating student behaviors threatening safety.*" [MO, 24, F, 2]

## 2. Duties which Psychological Counselors may Assume in Relation to School Safety

The opinions of psychological counselors about duties which they may assume in relation to school safety were evaluated under three basic headings. The results were shown in Table 1.

**Table 1. Duties which Psychological Counselors may Assume in Relation to School Safety**

S.N	Students	Psychological Support	Preventive Works	Works Aiming at Parents
1	BL, F, 24, 2	•		
2	HL, M, 28, 4		•	
3	AL, F, 25, 3	•		
4	SO, F, 23, 2		•	
5	AO, M, 33, 11		•	
6	KO, M, 30, 7			•
7	SO, M, 32, 10		•	
8	TO, F, 29, 7		•	
9	BI, F, 23, 3		•	
10	MI, M, 27, 4			•
11	KL, M, 25, 2		•	
12	MO, F, 24, 2		•	
	Total (f)	<b>2</b>	<b>8</b>	<b>2</b>

The opinions of psychological counselors about psychological support can be expressed like this: *"In relation to school safety, we can serve in training of students about such matters as anger control, peer pressure and correct communication methods. Apart from this, we can work on the matter of giving students threatening school safety psychological support."* [BL, 24, F, 2]

The opinions of the psychological counselors about preventive works were like these: *"group counseling and individual interviews can be held with students who are likely to cause security problems at school. Moreover, awareness-raising seminars can be given to teachers and families "*. [BI, 23, F, 3]

The opinions of the psychological counselors about works aiming at parents were like these: *"Works aiming at parents can be done. Parents can be given training about this matter. In this way, parents can be made to take precautions about the matter of preventing negative behaviors of students."* [AO, 33, M, 11]

### Conclusion and Suggestions

The opinions of the psychological counselors about their roles and responsibilities in relation to school safety were evaluated under the headings of psychological security, assuming too many responsibilities, legal regulations and duties of psychological counselors. The duties

which psychological counselors may assume in relation to school safety were classified as psychological support, preventive works and works aiming at parents.

Considering the results of the study, the following suggestions were made:

Roles and responsibilities of psychological counselors in relation to school safety can be determined more clearly via legal regulations.

In order to prevent security problems at schools, each school counselor can make a school psychological security plan by considering current conditions of their schools.

**Keywords:** Psychological Counselors, School Safety, Roles and Responsibilities

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# **The School Absenteeism among High School Students: Contributing Factors**

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Student absenteeism is defined by Teasley (2004) as a period of time when a student does not attend school, has become major and continuous problem among high school students in many countries. Indeed, numerous studies conducted to answer a question that is why high school students miss classes. In this notion, Teasley (2004) have noted numerous risk factors contribute to student absenteeism such as family health, low income, poor school climate, drug and alcohol use, transportation problems, and community attitudes towards education. For example, Pehlivan (2006) found that the major reason given by students for non-attendance at lecture or school were bored at school, dislike of school and lessons, encouragement of friends, and lack of expectations about education. Briefly, above studies suggest that problem of student absenteeism has complex nature that includes personal, family, school and community components.

Detrimental effect of student absenteeism on students has been studied extensively. The absenteeism among high school students can lead to more negative effect such as academic performance and many social problems. Epstein and Sheldon (2002) stated that student with absenteeism miss opportunities to learn the material that enables them to succeed later in school and; fall behind their classmates in academic achievement. In this notion, previous studies have revealed that student absenteeism is related academic failure and academic performance (Klem & Connell, 2004; Korir, Charo, Ogichi, & Thinguri, 2014). Smerk and Reimer (2005) stated that student with absenteeism often engage in high-risk behaviors that lead to referral to the juvenile justice system. In conclusion, student absenteeism not only impacts students' academic development but also affects their social development.

When examining the related literature, plenty of studies take place about the reasons and effects of student absenteeism in abroad. However, in our country, this issue is not taken into account enough. In consequence, the aim of this study is to examine relationship between personal factors (academic self-perception, attitudes towards teacher and school, motivation and goal valuation), family characteristics (parents' educational level and income), student absenteeism and academic achievement in structural equation model.

## Method

### Participants

This study included a total of 423 high school students (58.4 % of boys and 41.6% of girls). Participants' age ranged from 15 to 18 years with a mean of 15,76 ( $SD = 1.79$ ) for total samples.

### Instruments

#### Statistical Analyses

Data was analysis by SPSS 15. Coefficient of Pearson Correlation was utilized to set the relationships between variations; one-way ANOVA were also used to test whether the dependent variation differentiated with respect to independent variations. The direct and indirect relations between all variables were tested via observed and latent variable path analysis with AMOS 7.0

### Results

Results showed personal factors (academic self-perception, attitudes towards teacher and school, motivation and goal valuation), parents' educational level were statistically significant negative associated previous absenteeism (T1) and current absenteeism (T2). Results also noticed that academic achievement was negatively related to T1 and T2 absenteeism. Results of ANOVA also showed that student absenteeism differed in respect to parent's educational level and income level. The lower educational level of parents and income level, the more students' school absenteeism rate is.

The results of Structural Equation Model (SEM) indicated that the model was accepted as adequate:  $X^2(35, N = 344) = 102.412$  and  $p < .001$ . Furthermore, the  $X^2$  ratio was below the suggested 2:1 ratio ( $X^2/df = 2.926$ ). GFI = .95, RMSEA = .075 (.058-.092), SRMR = .044, CFI = .94, TLI = .91, IFI = 95, NFI = .92. The results showed that previous absenteeism was predicted by personal factors, family factors. Results also showed that T1 absenteeism predicted T1 academic achievement. Finally, results of SEM analyses noticed that T2 absenteeism was predicted by personal factors, family factors, T1 absenteeism and T1 academic achievement. Personal and family factors accounted for 9% of the variance in T1 absenteeism. Personal factors, family factors and previous absenteeism together accounted for 44% of the variance in T1 academic achievement. Finally, personal factors, family factors, T1 absenteeism, and T1 academic achievement together accounted for 28 % of the variance T2 absenteeism

### Conclusion and Suggestions

The findings of study noticed that students who have negative academic self-perception, negative attitudes towards teacher and school, lack of goal, and absence of motivation, are more likely to have school absenteeism. Findings also showed that students, whose parents have low educational level and low income, are more likely to have high level of school absenteeism. Finally, findings noticed that students' academic achievement was affected by absenteeism. This study provides some important findings for both psychological counselors and educators. Psychological counselors and educators can use finding of this study to develop intervention programs for helping students who suffer from school absenteeism.

**Keywords:** School absenteeism, personal factors, family factors, high school students

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# **The Effects of Counseling Supported with Cognitive Behavioral Approach in Selective Mutism “Case Study”**

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**Purpose:** Selective mutism is identified as a problem which is the lack of speech in one or more contexts or settings in DSM-5 (2013, p.45). The affected child and adults generally have normal language skills but they do not initiate speech or reciprocally respond when spoken to by others. This disturbance often marked by high social anxiety. In DSM-5, selective mutism is classified as an anxiety disorder. In clinical settings, individuals with selective mutism are almost always given an additional diagnosis of another anxiety disorder like social anxiety (DSM-5, 2013, p.197). Some of these individuals with this disorder do not speak for a year or more (Krysan, 2003). A person with mutism does not speak, although there is no physical barrier. The behavior theorists explain this situation as to be “reinforced learning pattern” (Leonard and Topol, 1993) or “a consciously manipulation method to control of environment”(Porjes, 1992, p. 369; Krysan, 2003, p.31). Another related explanation has been expressed by Albert Ellis. According to Ellis, thoughts and behaviors reveals each other because there is a relationship between cause and effect (Corey, 2008; p.291). In these circumstances, it can be said that it has a decisive role of cognitive structure in the mutism problem. Therefore, in this study, it is aimed to see whether individual psychological counseling supported with cognitive behavioral approach in selective mutism case is effective or not.

**Method:** In this study, a qualitative method is adopted in order to evaluate the effects of individual psychological counseling supported with cognitive behavioral approach in selective mutism case.

**Research Design:** A case study design is used.

**Participants:** The study consist of a single participant, 33 years old single woman. She has been diagnosed with mutism relation to severe grief depression.

**Data Collection Tools:** In this study, information has been obtained using four different tools. One of them is the information obtained from counseling sessions by means of the client expressed herself by writing. This data consists of the client’s characteristic attitudes, life skills, life story and her cognitive and behavioral patterns. The second data collection tool is a subjective scale which is frequently use in cognitive behavioral approach and the client rates her condition on a scale between 0-10. The purpose of using this is to make the client aware of her cognitive and behavioral changes within herself which helped to keep her motivated. The third data collection tool is the 1978 form of The Beck Depression Inventory (Savaşır and Şahin, 1997, p.36). By applying a pre and post-test it aimed to measure and evaluate the degree of depression symptoms. The fourth data collection tool used pre-and post-test in the study is Hollon and Kendall’s Automatic Thinking Scale which measures the frequency of automatic negative thinking (Savaşır and Şahin, 1997, p.39).

**Data analysis techniques:** In this study, content analysis method was applied by evaluating the results that were obtained from beck depression inventory, automatic thinking scale and subjective scales in order to establish the client's progress.

**Findings:** The Beck Depression Inventory was used in order to determine the severity of depression signs. The client got 52 marks on pre-test and 7 marks on post-test. These results showed that the client had suffered from severe depression before starting counselling sessions. However, after counselling the indicators of depression severity decreased. Similarly the automatic thinking scale was used in order to determine the frequency of automatic thinking producing. The client got 135 marks on her pre-test and 35 marks on her post-test. These results showed that the client produced far less frequent automatic thinking. According to the results of the subjective scales, the client changed in cognitive and behavioral aspects. In addition, the most important indicator about the client was that she started to speak again.

**Conclusions:** In this study, the findings supported the effectiveness of psychological counseling supported with cognitive behavioral approach for an adult with selective mutism. A total of sixteen sessions were administrated, the last two sessions were carried out verbally.

**Suggestions:** This case study focused on the effect of cognitive behavioral approach on traumatic impressions. Other studies can be carried out to find the accelerating effects of desensitization techniques on the traumatic impressions.

**Keywords:** Mutism, Depression, Cognitive Behavioral Counseling

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# Yozgat Police Vocational College Comprehensive Developmental Guidance Program Designing Process

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21. Century Information Age requires development of human resources with various qualities. Information Age people are expected to be critical thinker, prone to cooperative works, and know and accept themselves, and also expected to have full knowledge about information technologies, effective communication skills, and career management skills. Educational institutions need to configure human resources in order to be responsive to new values of Information Age (Nazlı, 2014). The comprehensive developmental program model is designed to support whole student development. It emphasizes strengthening students' resiliency by helping them gain life skills such as self-knowledge, effective communication skills, decision making problem solving skills, and career planning skills. It also is a model that focuses on preventing potential problems (Gysbers & Henderson, 2012).

This situation requires structuring Guidance and Psychological Counseling services, which reserve a significant place in educational system, in a way not only focused on problems and crises but to be preventive and developmental. One of the educational institutions in our country, who felt this necessity and took an action, is the Police Academy. In the information age, Guidance and Psychological Counseling services must be organized in a way to support whole students' life career developments. The purpose of this current study is to share works have been done in the Yozgat Police Vocational College CDGP designing process phases (planning, designing, implementation, evaluation and improvement) in summary to the readers.

## Method

The project is being carried out with research-development model. In this project, works have been grounded on ASCA and Gysberian K-12 Comprehensive Guidance Program Model under the supervision of Norman Gysbers. Planning phase of CDGP has been started at March 2013 in Yozgat Police Vocational College, and it's ended with the completion of development phase at July 2014.

CDGP has been designed in five phases (planning, designing, implementation, evaluation and improvement). The works done in these phases are below in summary:

*1. Planning:* It is the first phase a substructure is set up and groundwork is laid. In this phase, structure of developmental guidance model has been associated to mission and vision of Police Academy and needs of students. As a result of this association, policy of Yozgat Police Vocational College and main purpose and competency areas of CDGP have been determined.

*2. Designing:* It is the phase, draft of the developmental guidance model is prepared according to the gathered data from the first phase. Three components of CDGP (content, organizational

framework and resources) have been determined and main intervention programs have been prepared and tested with pilot studies in consideration with the need analysis data.

*3. Implementation:* CDGP is carried out in this phase. CDGP programs have been implemented by Psychologist of Police Vocational College under the coordinatorship of project principal investigator within the fall and spring semesters of 2013-2014 academic year.

*4. Evaluation:* It is the phase that CDGP is controlled whether it is in the desired level. Evaluation has been done in short and medium term. Evaluation has been done at the end of every program implemented (classroom guidance, psychoeducation, peer helping) in the implementation phase, and in May towards the end of semester medium term evaluation data have been gathered via year-end evaluation questionnaire.

In the 2013-14 academic year, for the medium term evaluation of CDGP designed for Yozgat Police Vocational College a year-end evaluation questionnaire administered to 212 volunteer students (123 1. grade and 89 2. grade students). In the questionnaire firstly tried to determine how students perceive Psychological Counseling and Guidance services. It is found that students perceive Psychological Counseling and Guidance services beneficial for themselves (76.9%), they recognize the psychologist (88.7%) and they think psychologist is supportive for themselves (89.2%). Questions related to project have been asked to the students and 86.3% of them stated classroom guidance program was helpful for themselves. Same results were reached for 83.9% of them for psychoeducation programs, 83% for life-talk conferences and 68% for the peer helping education given to the class prefects. When it is asked to students which of the program they wanted to be continued next year, results were 100% of them for classroom guidance program, 73.1% of them for psychoeducation program, 73.1% of them for peer helping program and 64.2% of them for life-talk conferences they say they wanted to be continued. In addition, 81.6% of students think CDGP will contribute to their current and future life but 18.4% of them think the opposite, and 75% of them think project works and Psychological Counseling and Guidance services efforts make a positive effect on school atmosphere. It is understood that 78.8% of the students wanted works which started with the project to be continued. Obtained medium term evaluation data show that developmental guidance based Psychological Counseling and Guidance activities were internalized and CDGP is supportive for students' current and future life.

*5. Improvement:* According to the obtained data from evaluation phase CDGP have been revised. In this phase with revising evaluation data, in what extent CDGP gain competency to students and which area need revision are determined and a decision made about what changes will make in the next academic year programs.

## **Result**

A project has been initiated in the Police Academy in order to support police candidates' life career developments with reconstructing Psychological Counseling and Guidance services according to "developmental guidance" model. In accordance with this purpose, CDGP has been designed according to the Police Academy Yozgat Police Vocational College's structure and needs of students and adaptability of the model in a higher education institution has been tested. In the reconstruction process started at March 2013 and continued till July 2014, developmental focused Psychological Counseling and Guidance services in Yozgat Police Vocational College supports students' developments and make a positive effect on the school atmosphere.

**Keywords:** Developmental guidance model, Comprehensive developmental guidance programs

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# The Analyses of Ethical Dilemmas in Psychological Counseling and Guidance Services at North Cyprus

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**Purpose:** Traditional education system have included only teaching and administrative management. In this system it has not required any services for mental health and psychological wellbeing. Social and global developments are responsible for the focus on psychological wellbeing of an individual. After these developments, contemporary education system had proceeded to provide counseling services in schools. The main roles of the school counselors provide comprehensive and developmental counseling related services for all students. The cornerstone of any counseling relationship is that the counselor has responsibility for their clients' right in the issue of ethical principles to protect them from any harm (ACA, 2014). Unfortunately, school counselors are not effectively trained to solve ethical dilemmas and ethical decision making in psychological counseling and guidance undergraduate programs. Therefore, it is important to understand the decision making process of psychological counselors to establish qualified professional relationship in therapy. To conclude, this studies aim is to be based on three research questions which are how psychological counselors solve ethical dilemmas, how they make decision when they are faced with the ethical dilemma process. Do gender, age, working places, their knowledge and years of experiences account for any differences in the questions asked above?

**Method:** Qualitative research methodology enables us to understand social phenomena with the views and experiences of participants (Isaach, 2014, p.318). In this study, in order to explore the decision making process of a psychological counselor a qualitative research technique was used.

**Research Design:** Only psychological counselors' views who are working at different counseling and guidance services at North Cyprus have been obtained in this study. Therefore, the research was designed on the basis of case study.

**Working Groups:** This study group is comprised of a total of 23 psychological counselors from different psychological and counseling guidance services in North Cyprus. The study group members are working at North Cyprus universities' psychological counseling services (n= 7), public high schools (n=9), private high schools (n=5) and Psychological Counseling and Guidance Research Center, (n=2), All of them are the members of Cyprus Psychological Counseling and Guidance Association. The percentage of men and women psychological counselor who are participated in this study are 39, 1% (n=9) and 60, 9% (n=14), respectively.

**Data Collection Tools:** An informed consent form, demographical information form and sample of ethical dilemmas scenarios in different subjects which are psychological counselor faced in their work were developed by a researcher to collect data and invite them to this study. All of the members of psychological counseling association are invited via informed consent form to this study. Then, study group was selected based on who responded to this invitation. The purpose of the study was explained in the informed consent form. They were also aware that they can refuse to participate, skip any ethical dilemmas scenarios, or

withdraw at any time without penalty. They were face to face interviewed. Demographical information form was filled to gather data of which are their age, gender, knowledge and years of work experiences. Consequently, they were asked to reply to how they behave, even if they had any troubling incident in their work life. In order for validity and reliability of data collection tools experts' opinions were obtained.

**Data analysis technique:** In this study a content analyses technique was used. The content analyses completed into these 2 categories (Yıldırım and Şimşek). The study group responses were clustered in the based on American Counseling Association Codes of Ethics.

**Findings:** The study results indicated that participants' ages ranged from 22 and 38 years. Their experiences of working years are also ranging between 1 and 15 years. The study findings also suggest that psychological counselors are aware codes of ethics. They address confidentiality, informed consent for ethical dilemmas that faced them.

**Conclusions:** The study which is designed to understand how psychological counselors respond when they faced ethical dilemmas, suggests that psychological counselor address confidentiality. They are also aware in which issue they can break the confidentiality principle. Their gender, age, knowledge and years of experiences don't account for any differences in their decision.

**Suggestions:** This study has utilized data collected with an interview technique. The working group was raised in different counseling services at North Cyprus, it limits generalization. Findings were interpreted. Therefore, it is impossible to say that one variable is cause to another variable. Additionally, findings which are psychological counselors' responses are limited to explain it with the ethical culture. In the future, studies might consider the effects of culture. The scenarios in this study were designed based on confidentiality principle. Thus, working group responses were considered only with this issue. Additional research might also develop new scenarios in different codes of ethics to understand psychological counselors' ethical decision making process.

**Keywords:** Analyses of Ethical Dilemmas, Psychological Counselor, North Cyprus



**THEME 7:**  
**Literature and Education**

# The Contribution of Postmodern Narratives to Literature Teaching

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This research aims to understand the contribution of postmodern narratives to literature teaching with a specific emphasis on what 12 graduate students in Turkish Teaching Department at a university in Central Anatolia acquired while reading postmodern narrative texts.

The research involves four phases:

Firstly, the students were informed about the radical changes in time and space perceptions after the 20th century developments in **physics**- Einstein's general theory of relativity, Heisenberg's uncertainty principle, Max Planck's quantum theory that rocked the principles of Newtonian physics- which paved the way for the emergence of postmodern narratives. They were told about the new approaches and theories in **psychology**- Freud's psychology of unconscious depths, Carl Gustave Jung's collective unconscious, Adler's individual psychology based on knowing human nature, Bergson's studies on intuitionism- as well as **technological innovations** encircling the individuals' both subjective and social life and creating a different axiologic system in them. It was emphasized that matter/substance is the sole dominant power. In addition, we dwelled on sciences and thoughts developing with the reality of the new world, the **existence problem and human perception**.

Secondly, literary reflections of the aforementioned radical changes and the nascence of a new literary aesthetics different from the older one were highlighted with the exemplary novels *Ulysses* and *Die Verwandlung* (The Metamorphosis).

Thirdly, the students were asked to read *Tutunamayanlar* (The Good for Nothing) known as the first modernist opus in Turkish literature, *Kara Kitap* (The Black Book) as one of the first examples of postmodernist narrative, and *Suskunlar* (The Mute) as an advanced postmodern narrative. Mini group discussions were made on these literary works in a classroom environment.

In the last phase of the research, the students were asked through a semi-structured interview about what they acquired wittingly or unwittingly while reading the novels on 6 basic levels in terms of: 1. **Improving higher-order thinking skills**. 2. Acquiring a rich literary culture through **intertextuality**. 3. Ability to comprehend the **existence** problem and interpreting the life. 4. Awareness of **Time/Place and Space** perceptions. 5. Enjoying and having a nice time while following a **crime/detective fiction**. 6. Ability to **distinguish between narrative techniques**. They were asked to write out their acquirements. Their responses were ascertained via descriptive analysis.

According to the results of the study which is based on a qualitative research design, the students stated that they were able to use their **higher order thinking skills** of problem solving, discovering, creative/critical thinking and questioning better and they noticed that they improved themselves in these fields while reading the mentioned narratives. Although they had difficulty in correlating archaic texts in terms of motif, image, allegory, metaphor and character due to their lack of knowledge and experience in **intertextuality**, they said that they were able to see the differences and similarities between the texts pertaining to Eastern,

Western and Turkish literatures. They expressed that one questions himself by excogitating on **the existence problem** and tries to find his “self” while searching other “selves”. They said they acquired new perspectives in explaining the meaning of life. They pointed out the change in perceptions of time by citing the **uses of “time” in narratives**. They said they liked and impatiently followed the crime fiction in narratives. They added that they had the chance **to see the different narrative techniques together**.

At the end of the research, it was suggested that the students should improve their higher order thinking skills more, gain different perspectives on human and life, and enrich their reading cultures through postmodern narratives.

**Keywords:** Higher order thinking skills, postmodern narrative constructs, learning

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## Enhancing Critical Thinking Skills through Short Stories

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The term "critical thinking" has been defined by numerous scholars in a variety of ways and there is no widely accepted standard definition. However, as Hager and Kaye (1992, p. 26) point out "considerable agreement has been achieved that critical thinking is a combination of abilities and dispositions." Multiple definitions of the term are included in this study to provide a clear understanding of this abstract cognitive ability. John Dewey, the pioneering American educator, calls critical thinking as "reflective thinking" and defines it as "Active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends." (1909, p. 9)

Those who think critically display the characteristics in [a.] grasping the meaning of a statement, [b.] judging whether there is ambiguity in a line of reasoning, [c.] judging whether certain statements contradict each other, [d.] judging whether a conclusion follows necessarily, [e.] judging whether a statement is specific enough, [f.] judging whether a statement is actually the application of a certain principle, [g.] judging whether an observation statement is reliable, [h.] judging whether an inductive conclusion is warranted, [i.] judging whether the problem has been identified, [j.] judging whether something is an assumption, [k.] judging whether a definition is adequate, and [l.] judging whether a statement made by an alleged authority is acceptable. (cited in Kristensen, 2008, p. 31)

Using critical thinking skills in English classes enhances students' performance. Halvorsen (2005, p.1) argues that the benefit of incorporating critical thinking into the ELT classroom is twofold: Firstly, classes which involve elements of critical thought tend to be generally more interesting and engaging [...] Secondly, using issues that encourage critical thinking helps to give the classroom a more meaningful and cohesive environment.

Lipman (2003; cited in Sanavi and Tarighat, 2014, p. 80) states that teachers are responsible to develop critical thinking in their students rather than push them from one educational level to the next. Different studies attest to the effectiveness of critical thinking in improving ESL writing ability (Rafi, 2009); language proficiency (Liaw, 2007); and oral communication ability (Kusaka & Robertson, 2006). Finally, as Rafi (2009, p. 65) articulates "learners may become proficient in English language if they are motivated and taught how to display critical thinking in English language usage".

The purpose of this study is to tackle whether critical thinking skills can be enhanced through short story or not. Two high school classes which participated in the study were given Cornell University's Critical Thinking Questionnaire. In the treatment group, students dwell upon the four stories through critical thinking skills. Their structured class discussions pave the way for them to be exposed to the critical thinking use through *Mr. Loveday's Little Outing* by Evelyn Waugh, *Mrs. Brill* and *The Fly* by Katherine Mansfield, and *A Family Summer* by Kazuo

Ishiguro. The results highlight the importance of the synergy between critical thinking strategy use and short story.

**Keywords :** Critical thinking, short story teaching, language teaching

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# **Title How do Young Readers Give Meaning to The Pictures in A Story Book?**

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## **Purpose**

The purpose of the study is to investigate first-grade students' abilities of story construction from a picturebook. Current approaches to learning and education emphasize the ways children comprehend meaning from what they see, hear, read or sense. Based on their prior knowledge, skills, strategies and expectations, children should be able to assemble different understandings from various materials they sense so that they can construct their own meaning (van Kraayenoord and Paris, 1996). Among others, graphic or symbolic materials presented in printed form have significant importance in educating young children. Research shows that book experiences provide valuable opportunities for children to become familiar with the symbolic representations of cultural tools that are the main transmitters of education. Through these experiences, children learn to give meaning to book contents.

One of the important skills children learn as a part of book experience is to tell a story, which includes explaining and describing the story elements. When children read picturebooks, they learn to make connections between objects and characters (Renshaw, 1994), become aware that every page in a picture storybook is connected to the proceeding and succeeding pages and every page or picture composition contains integrated pieces of elements which tell a story piece, connected to the whole story. Telling a story by connecting the elements of the pictures in picturebooks also requires familiarity with picturebook conventions as well as cultural background and cognitive abilities.

## **Method**

This qualitative study was conducted with first grade elementary school students from two public schools in a small province of a large city in southwest Turkey. The schools serve relatively low socioeconomic areas. The schools were conveniently selected. Thirty-nine first grade students, 20 females and 19 males, participated in the research and most of them received pre-school education. Interview was the main data collection method. The participants were individually interviewed by a researcher. All students were voluntarily participated in the study. In the interviews, first the participants were shown Behic Ak's Uyurgezer Fil (2007). Then, they were allowed to view the pages of the book without reading what is written on the pages. The text was covered with white paper. After closely examining the pictures, the participants were asked to build a story drawn from the pictures. So, they basically made up a story on what the pictures tell them. Each participant shares a story and a researcher wrote the whole story. The purpose of the interviews was to explore how first grade students interpret pictures of a picture book.

The main purpose of the research is to portray an in-depth understanding of the children stories. To accomplish this purpose, first, each story was holistically analyzed whether the story fits into any of the following categories:

- The story represents a coherent scenario with introduction, development and conclusion sections.

- The story does not represent a coherent scenario with fragmented pieces.
- The story has a nice introduction, but the student could not complete it.

Next, the stories were analyzed one more time to understand any differences and similarities between them. A constant-comparative method will be used in this phase. The aim is to explore what kind of stories the participants built in response to the pictures of the picturebook.

For reliability, all researchers independently coded a portion of the interviews and compared their coding. Over 80% rater-agreement was found, which shows an acceptable figure in qualitative research.

### **Findings**

It was found out that

- only nine (9) of the participant children produced a coherent scenario with introduction, development and conclusion sections.
- four (4) children made a good start but they could not complete the story; so, the story was left unfinished.
- twenty-four (24) children could not develop a coherent scenario with fragmented pieces; their stories were comprised of unconnected short sentences.

### **Conclusions**

Findings indicate that a big portion of participant children could not understand and perform the task. It was observed that participant children did not perceive the pagespreads as series of pictures that tells a story; rather, they perceived them as separate pieces. It may indicate that children have difficulty in making connections between proceeding pictures. This belief has been confirmed by the researchers' observations. During the interviews, researchers observed that children were not familiar with this kind of activity and found it difficult. Also, it is possible that children did not have the habit of reading books; therefore, they were not familiar with the picturebook conventions.

### **Suggestions**

The children's educational experiences should be enriched. Further studies are needed to understand the nature of the students' response to picturebooks in similar environments.

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## **The Analysis of Some Thought Experiments In Terms of the Dimensions of Hypothetico-Creative Reasoning Skills**

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The aim of this reaserch is to investigate some thought experiments in science and philosophy in terms of the dimensions of hypothetico-creative reasoning skills and evaluate the their arguments in the context of hypothetico-deductive, hypothetico-predictive argumantations schemes. Hypothetico-Creative reasoning skills can be defined as reasoning skills based on six inner dimension of Lawson's hypothetico-predictive reasoning skills which are hypothetic reasoning, proportional reasoning, controlling variables, probabilistic reasoning, correlational reasoning and combinational reasoning (Lawson, 1995: 61-62), and six outer dimensions of creative thinking skills based on the literature research which are analogical thinking, convergent thinking, divergent thinking, metaphorical thinking,vertical thinking and lateral thinking through data-informationknowledge-episteme conversion and extraction processes in order to construct epistemological beliefs (briefly episteme) about scientific or general concepts (Duran, 2014: 91-92).

Thought experiments (Gedankenexperiment) can be defined as imaginary scenarios in which deductive thinking is mainly used in the process of reasoning upon a principle, hypothesis or theory. In a paper dated 1811 Hans Christian Ørsted was the first person who mentioned the term “thought experiment” as a separate source of knowledge and intuition (Brendel, 2004: 90). In other words, the fundemental basis of thought experiments is to make judgements and deductions about what would happen if the particular state of affairs described in the process of argumantation based on imaginary scenarios (Gendler, 1998: 398). Those imaginary experiments are mainly deal with the principles of philossphical or scientific arguments and the degree of the possibility that they may occur in real life situations (Heisenberg, 2000: 14). In other words, it can be said that, rather than focusing on a new understanding on nature or phenomena, the conceptual tools are of having importance in thought experiments (Kuhn, 1994: 291). Hence the techniques in real life situations and the complexity that it brings are mostly ignored in this respect (Heisenberg, 2000: 14). Thought experiments can be classified in various ways. For example, Gilbert and Reiner (2000: 268) classified thought experiments as expressed thought experiment which are rhetoric of justification to the scientific community of new inventions or discoveries, consensus thought experiments that addressed issues of known interest to a scientific community which could not be addressed through real experiments, teaching thought experimenst, that mainly aims at a criteria or principle to the students or intended population. Besides thought experiments can be classified as constructive

and destructive thought experiments in the context of their aim and argumentation on a principle (Brown, 2011: 32).

Paradox comes from two Greek words: para, meaning “contrary to,” and doxa, meaning “opinion.” It describes a situation in which two opinions are contradict with each other and this contraction is beyond of mere inconsistency in the form of presenting arguments p and not-p (Webb, 2002: 12). The root of term also covers the meaning of the words unexpected, astonishing, extraordinary, incredible (Hançerlioğlu, 2004: 22). Formally paradox can be defined as a form of deduction that begins with a reasonable proposition and brings a conclusion which is contradict with the reasonable one (Ghose ve Home, 2001: 62). It can be argued that paradoxes can be viewed thought experiments especially in relation with the inner dimensions of hypothetico-creative reasoning skills.

In this study, 6 thought experiments, Olber paradox can be taken as both paradox and thought experiment, (3 from physics 3 from philosophy) in the history of science and philosophy were analyzed in terms of hypothetico-creative reasoning skills through the 12 dimensional hypothetico-creative reasoning skills analysis form developed by Duran (2014). The participant in this study consists of 10 academicians working in Education Faculty of Ondokuz Mayıs University from different departments. They gave points for each sub-dimensions of thinking skills with some qualitative justification, then the data from these are analyzed for two ways. The average each points corresponding to each thinking skills are calculated and analyzed in accordance with themes created in accordance with their statements.

At the end of those analysis, it can be said that thought experiments were closely related with epistemological beliefs and hypothetico-predictive arguments. Firstly, it was seen that the dimensions of hypothetico-predictive reasoning skills of scientific thought experiments overweighted over philosophical ones in argumentation. Secondly, philosophical thought experiments are mostly created in the outer dimensions of hypothetico-creativity especially metaphorical and analogical dimensions, and they outweigh scientific thought experiments in this respect. Thirdly paradoxes and especially destructive thought experiments can be regarded in the same domain especially in terms of argumentation and deduction but it can be said that destructive thought experiments includes paradoxes in many respects. Forthly, it can be said that paradoxes are important conceptual tools which show the differences among the concepts, doxa (expectations, assumptions), beliefs, knowledge and episteme especially in terms of the dimension of hypothetico-creative reasoning skills. As for future research recommendations, thought experiments can be analyzed by a computer program which was created on the basis of hypothetico-creative reasoning skills.

**Keywords:** Thought Experiments, Epistemological Beliefs, Hypothetico-Creative Reasoning Skills

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**THEME 8:**  
**Rethinking Education**

# The Most Important Necessity in Modern Education Understanding: Individual Interest and Family Teaching Model

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Families that can provide private tutoring for their children know that special attention to children increases their success because one teacher can look after one child very well and can correct inaccurate information in the mind of a child sooner. However, it is hard to find a private tutor for each child and not all children have the chance of receiving private tutoring. There is a need for regulations to facilitate students' learning out of school by determining students' incorrect and incomplete learning experiences they have had in the school (Tan, 2006). It is a known fact that Turkish education system is exam-oriented and students prepare themselves for exams at each education level (Bilge et al., 2014). In this context, students try to prove themselves in these exams and make a great effort to perform better than their age-peers (Ames, 1992). Thus, students need to be supported by psychologists, teachers, parents and other professionals to increase their achievement or success (Moolla & Lazarrus, 2014; Jimerson, Oakland & Farrell, 2007). Instead of trying to replicate students by addressing individuals with different characteristics through the same environment and learning experience, the learning approaches that need to be thought as richness in implementation stage should be determined and new learning environments should be arranged. This will contribute to success of students in central exams, which has formed the base for design of the study.

## Purpose

This study, regarding "Family Teaching Model", aims at determining the opinions of students about;

- 1- Presence of a center which they could attend after school and where they could get personal help from each branch teacher,
- 2- Whether this center belongs to private entity or public entity,
- 3- Whether students will increase their success if they have a system where they can practice the lessons they could not comprehend in the school,
- 4- Whether presence of teachers that follow them at home and school and also help students in every possible way regarding their lessons out of school time will disturb the students.

## Method

This study was realized with the participation of students from 6<sup>th</sup> and 7<sup>th</sup> grade students from three middle schools and 10<sup>th</sup> and 11<sup>th</sup> grade students from three high schools in 2014–2015 academic year. 60 students in 6<sup>th</sup> and 7<sup>th</sup> grades from 3 middle schools and 60 students 10<sup>th</sup> and 11<sup>th</sup> grades from 3 high schools in Şanlıurfa city center were selected. A total of 120 students participated in the study. Firstly, students and school directors were interviewed and given information about the goal of study, topic and interview technique. "Family Teaching Model" was presented to participants in detail. The study was realized with students at two school levels. (A) 1-60 signifies students in middle schools; (B) 61-120 signifies students in high schools. Since each school level includes different schools, they are named as A1, A2,

A3 for middle schools and B1, B2, B3 for high schools. S6, S7 for 6<sup>th</sup> and 7<sup>th</sup> graders and S10, S11 for 10<sup>th</sup> and 11<sup>th</sup> graders are used as symbols together with the others above.

### **Findings and Discussion**

According to the results attained, almost all students understood model correctly and presented positive opinions about the applicability of model.

Students who favored family teaching center with all branch teachers had opinions which were collected under three sub-themes. Regarding the first sub-theme, students expressed their complaints about classes in their school which were so crowded. The second sub-theme includes expressions about teachers in schools who do not take care of students individually and do not pay attention to students' personal characteristics; thus, the lesson is not understood well. The third sub-theme shows that family structure of students and their houses are not suitable for them to study their lessons.

Students who wanted family teaching center to be fully free had opinions that were collected under two sub-themes. The most highlighted sub-theme by students is economical structure of their families. When the case that this study was realized in an environment that hosts so many seasonal worker families is considered, this result could be said to be significant. Also, students highlighted the injustice about getting prepared for the same exams with lower opportunities under this theme. The other sub-theme is psychological pressure felt by students when their families pay for their additional education or instruction.

Another main theme about "effects of family teaching centers on student success" has three sub-themes. The first sub-theme is that families want their children to be successful, which students are aware of. Students want to be successful in their lessons to please their families and realize dreams of their families. Thus, they were found to need family teaching center for this goal. The second sub-theme under main theme is that students want to be successful without families' financial support. Thus, students who do not have sufficient educational support want family teaching centers to be opened to close this gap.

As for the case whether presence of teachers that constantly deal with students, work to bridge the gap and inform their families and schools is disturbing for students or not, there are two sub-themes. The first sub-theme is how pleased families are with this application. Students are of the opinion that their schools and families will have more information about their success or achievement with this application. This finding can lead us to a conclusion that inaccurate learning experiences of students can be easily determined and handled. The second sub-theme is related to desire of students for guidance service for subjects that they feel to lack in some information.

**Keywords:** Individual interest, family teaching, individual differences, school, student, central exam

## Reconsidering the Idea of Educated Person Today

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The idea of raising the complete person is facing an incredible threat in the midst of today's digital age, but dehumanizing world. I am not here to complain about modern technological tools or social media outlets such as facebook or twitter or grumble about anti-modernity and technology, but rather, to revisit the idea and the nature of education in terms of how much today's education achieve, at least, a movement towards constructive change in students' mental capacities and behaviors. I will share my teaching experiences in various cultural settings such as the cases, for instance, when I enter classrooms, be in Istanbul or Beijing or Copenhagen since last ten years or so, I observe dramatic changes in increasing number of students' concentration, learning strategies and reading attitudes as they become more and more chronic scatterbrains, I must confess.

In this paper, I intend to analytically explore the idea of educated person in the context of our time as the dialectical relationship still takes shape between the traditional places of teaching and learning settings in the classroom and the challenges to our perceptions and attitudes created by the new threats, but also new possibilities of the internet technologies. On the one hand, internet seems to chip away student's capacity for concentration and contemplation, but on the other, we must admit that search engines like Google and digital encyclopedias like Wikipedia are significantly helping out to eradicate banking system of education. No longer we can pose questions in classrooms such as when American or French revolution took place; to put it succinctly, it becomes meaningless now to preoccupy mind and force students to memorize certain culturally and contextually significant names, dates or concepts since anyone can access to those sources in any where as long as they are equipped with competency in terms of how to access reliable sources that are digitally available out there. There is not doubt that the internet is integrated in to the larger gestalt of our lives. Students today are highly proficient in using the internet, but easily become bored, frustrated, or even hostile to traditional, conventional classroom teaching settings and learning activities. There is surely tension out there in the classroom especially with regard to the relationships between the space of the internet and the place of the classroom.

How the internet influencing and changing younger generation is a critical issue that deserves to be tackled separately on its own. Nicholas Carr, for instance, examines this topic in his book called *What the Internet is Doing to Our Brains: The Shallows*. He talks about how young generation become more and more chronic scatterbrains, how the internet is chipping away their capacity for concentration and reflection, and also how deep reading that used to come naturally has become a huge struggle. On the other hand, it is important to realize that the internet technology, for instance, is a very fast moving phenomenon; we have its tools, implementation first, and the we experience its implications. Many of the transitions or changes that have emerged from internet penetration have been unexpected. And this situation will probably continue. But we, as educators need to think about what is next in education, and reconsider who the educated person is today as we grapple with developing a new kind of intelligence as far as the internet or other social media technologies concerned; i.e. intelligence in the sense of how we use the internet on an individual level to solve problems

and engage community, but also concerning what these actions mean at an institutional and social level. It is still timely to revisit what John Dewey wrote in 1930s: “We have displayed enough intelligence in the physical field to create the new and powerful instrument of science and technology. We have not as yet had enough intelligence to use this instrument deliberately and systematically to control its social operations and consequences.”

This paper will argue for a move from seeing technology as a separate tool to integrating technology into an intelligent action in a way that would foster students’ essential attitudes such as deep reading and contemplation that make imaginative, rational and inventive mind possible.

**Keywords:** Idea of Educated Person, Information or Digital Age, Shallow Minds and Democracy

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# Attitude of Medical Students Towards Statistics and Scientific Research

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The importance of biostatistics and the basic knowledge about research methods in the health sciences are known but generally it was understood after graduation. The medical students of Meram Medical School take biostatistics courses in the first year of their education. Therefore it can be thought as an unnecessary and ridiculous course (Hannigan, Hegarty, & McGrath, 2014). They are not aware of the importance besides do not utilize statistics until they become intern student in clinics in their sixth year. According to observations by faculty and results of feedbacks, they have anxiety and problems with statistics although they had higher mathematic scores on the national University Entrance Exam. It is also known that statistics anxiety may be decreased and might not be a barrier for scientific research (Beurze, Donders, Zielhuis, de Vegt, & Verbeek, 2013). So, we redesigned the outline of the biostatistics course to be more understandable and more applicable to practice of medical students as a medical doctor.

**Purposes:** The purpose of this study was to determine the attitudes and anxiety levels of medical students towards statistics and scientific research and the factors contributing them.

**Methods:** This is a cross-sectional study. We applied a questionnaire to the randomly selected students of Meram Medical School on voluntary basis after an ethics approval. The questionnaire form has three parts: first part is about socio demographic variables, second part, consists of Statistics Attitude Scale (SAS) and third part is Scientific Research Methods Attitude Scale (SRMAS). SAS is a five point Likert Scale which has 33 negative and positive items. SRMAS is also a five point Likert Scale with 20 items. Both scales were validated by Metin Yaşar (2014a, 2014b). All statistical analyses were performed by SPSS 20.0. The descriptive statistics of numerical and categorical variables were presented. Independent sample t-test and analysis of variance were used to compare the means of groups in the case of normal distribution. Chi-square test was used to see the relation between the categorical variables (especially items). Cronbach's alpha coefficients were calculated for reliability and factor analyses were performed for two scales with KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity. An overall  $p$ -value of less than 0.05 ( $p < 0.05$ ) was accepted as statistical significance.

**Findings:** We analyzed 448 questionnaires. The majority of participants were first grade students ( $n=169$ , 37.7%) and more than half of them were females ( $n=259$ , 58.3%). Three of four students defined themselves as in moderate economic status ( $n=318$ , 72.6%). Nearly 88% of the students ( $n=393$ ) have preferred the medical education voluntarily. The SAS score was  $93.76 \pm 19.30$  points (min=37; max=146) and the Cronbach's  $\alpha$  was measured as 0.900 in this group. The SRMAS score was  $56.24 \pm 14.32$  points (min=20; max=100) and the Cronbach's  $\alpha$  was 0.905. There were no statistical difference in both scales in respect to gender, graduated

high school, medical education preference, hometown and economic status perception of students. However, Post Hoc test showed that there was a significant difference between the first (99.13±18.17) and second grade (89.67±19.84) students. Moreover, we obtained six factors in SAS and one of them was related with the viability of statistics in practice, in which the correlations between the items were significant ( $p<0.05$ ).

**Conclusions & Suggestions:** The higher anxiety scores of first grade students may be caused of the fear of unknown whereas second grade students have less anxiety since they have completed biostatistics course in redesigned manner. Onwuegbuzie & Wilson (2003) suggested that the instructor's positive attitude and encouragements, and co-operative learning in class and computer lab can reduce the anxiety of statistics. For research anxiety, Yılmaz & Çokluk (2010) stated in their study that research anxiety level of graduate students varies according to whether they have taken a course in scientific research methods. Medical students should take courses on scientific research methods to reduce their anxiety. Statistics courses are not enough to have research and analysis skills and it should be given in different grades, especially at the beginning of clinical years of medical education. Therefore we suggest that the duration of biostatistics course should be increased including the knowledge of research methods and computer lab facilities to gain practice in analyses.

**Keywords:** Statistics, Medical Education, Research, Anxiety, Medical students

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## Modern Literary Arabic versus Spoken Arabic – Modernization of the Language, or Teaching the Language?

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In the Arabophone World, the sociolinguistic situation is complex. On the one hand, there is diglossia – oppositional co-existence of literary and dialectal forms of the Arabic language, and on the other one, bilingualism, found in one part of the Arab community. It should also be taken into account that spoken Arabic/dialect in every given country may gradually become the “literary” (Egyptian, Syrian, etc.) language, as literature is created in it (this issue is of particular importance from the viewpoint of development, perspective).<sup>5</sup>

The expected limitation of functions of the literary language will lead to the situation when an increasingly greater part of the Arab population will be far from knowledge of literary Arabic (as is known, a certain part of the Arabs does not speak or insufficiently speaks this language).

Against the background of such development of events, literary/classical Arabic in some contexts is already qualified as a dead language – the language fallen out of use.<sup>6</sup> If in the perspective the scenario is realized which can be assumed on the basis of the analysis of the synchronic situation, it may happen so that in practice literary Arabic will turn into a language spoken only by Arab and non-Arab specialists – Arabists .

In this context it is often heard that it is necessary to modernize the Arabic language. But such a modernized variant already exists – this is the so-called Standard Arabic/ Modern Literary Arabic. However, formation of this variant of Arabic has not changed the situation fundamentally. At the same time, as another aspect of modernization of natural Arabic may be considered the process of full (spoken and literary) functioning of the dialects, that is already in progress.

Apparently at present it is topical to pose the question not as to further modernization of the literary language and its approximation to spoken forms (resp. dialects), but about modernization in the field of education. In particular, this is the issue of modernization of methodology for teaching Arabic. To cite a famous quotation, today Arabic at schools is taught as was 1000 years ago. This fact is so wellknown that it is even caricatured in fiction.<sup>7</sup> E.g. in famous *maqamas* “*Said and his Wife in Paris*” by Beyram at-Tonsi, the main character notes that the literary language is taught to children by learning by heart phrases they do not understand, for example,

كان فعلون ماض ناقصون مبنيون على الفتحة لا محلا لهو من الاعرابي<sup>8</sup>

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<sup>5</sup>See Silagadze, A., Ejibadze, N., On Arabic Dialectal Literature (2014). – In: *E. Javelidze, Historical-Philological Collection*, p.106-112.

<sup>6</sup>See Silagadze, A., Ejibadze, N. (2012), *On Arabic Diglossia*, Tbilisi, p. 12, 40.

<sup>7</sup>See Beyram at-Tonsī (n.d.), *as-Sayid wamratu fi Bārīs*, al-Qāhira.

<sup>8</sup>Spelling in the phrase is deliberately distorted by Beyram Tonsy (exactly for the purpose of mockery).

*“kāna is a defective verb of the past tense with unchanged ending “a”, which does not participate in grammatical linking of words”*, in which a pupil does not understand anything.

On the other hand, there is another system of teaching Arabic, which can be conventionally referred to as a system intended for foreigners, based on approaches of Western Arabistics. Owing to this system, students learn the basics of Arabic in several years, and quite effectively. Thus, the language learning process is relatively simpler.

There are different approaches on a number of issues in Arabic and Western methods of teaching Arabic.

We shall offer several examples to demonstrate that teaching methodology needs to be improved. One of these deals with the question of the so-called *hamza* in modern Arabic spelling.

Different approaches are found concerning the issue of the definition of verbal and nominal sentences: according to Arabic tradition, a sentence is considered to be nominal, if it starts with a noun, even if the predicate in it is expressed by a verb. At the same time, a generally accepted definition is more appropriate and more suitable to study, according to which, a sentence is nominal if the predicate is expressed by a noun, and it is verbal if the predicate is rendered by a verb. Similar examples can be cited in abundance.

The above-mentioned does not mean that everything should be rejected on which the Arabic tradition of teaching is based. For example, the principle offered by Arab grammarians, according to which, in the Arabic verb the opposition of the so-called Perfect, Imperfect and Imperative forms is found on a single level, whereas all moods, except Imperative, are considered separately, and not in parallel with Imperative, seems quite correct proceeding from the specificity of Arabic. In this case, it is not desirable to consider by the analogy of other languages, on the one hand, forms of the Imperative, and on the other hand, Indicative, Jussive and Subjunctive moods, as in Arabic they do not function on a single plane.

It can also be noted that one of the actual ways for reformation of teaching of the Arabic language in the Arab reality is to take as the basis the European experience of teaching Arabic to foreigners. At the same time, it should be identified which issues clearly require modification and teaching of which issues need no modification.

To carry out the educational reform, it will become necessary to train teachers of Arabic (and even more complicated situations are known from the history of the Arab world, when there were no teachers of Arabic in the Maghreb countries and they were invited from Eastern Arab countries)<sup>9</sup>, which, in itself, is a complex issue.

It is difficult to say whether such reformation will have a significant effect, however, today the need for modernization of this field should be considered as a fact.

**Keywords:** Arabic, teaching, modernization.

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<sup>9</sup>K. Versteegh (1997), *The Arabic Language*, NY, p. 201.

## **Cooperative Learning: Bridging the Algerian-Turkish Cultural Divide**

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Teaching EFL (English as a Foreign Language) is conceived as one of the dynamic processes in this increasingly changing world, and It is little wonder that we, as foreign language teachers, often seek to know as much as we can about the effective methods and techniques that might be fruitful if used appropriately in the classroom. In fact, there is a considerable number of astonishing educational problems that face our EFL learners along their learning process, and which keep calling for solutions, ranging between being obliged to deal with different and sometimes confusing aspects of language, missing the sense of enjoyment in the educational setting where English is taught, or simply lacking the needed skills to learn a language, in addition to usually feeling uncomfortable if there are other students in the classroom with different nationalities. These facts are, in fact, the reason why cooperative learning was suggested as an alternative solution to the student-centered approach in a lot of works (Slavin, 1991).

Indeed, graduate students will neither work nor live alone in this world. Conspicuously, an abundant amount of interaction will be faced by individuals during their work experiences. Students, though may learn even in competitive and individualistic instructional settings, can learn better in cooperative situations; as they develop positive relationships with peers and gain knowledge from interaction with group mates. They may, additionally, be well prepared for later interaction with colleagues in the work places (Johnson & Johnson, 1989)

Reading about the teaching techniques and methods will in all probabilities lead teachers to come across a journal, a book, or an instructional material where cooperative learning is highlighted and discussed. The reason stands on the fact that most researchers aim at spreading the magic of cooperative learning all over the world; seeking essentially to convince teachers that this approach is worth trying in EFL classrooms as well. Actually, the most optimal approaches that better positively influence the learners' social and academic outcomes are the ones which have their roots in the human development, teaching, and learning theories. Therefore, the success of cooperative learning is claimed to be mainly due to the theoretical foundations, and the numerous experimental implementations in various contexts around the world.

Educators today hear a lot about gaps in education, including achievement gaps, funding gaps, or school-readiness gaps. However, still there is another gap that often goes unexamined: the cultural gap between students. Accordingly, this research questions the effect of the cooperative approach on members of the multicultural cooperative group, as far as culture is at the forefront of nowadays' education, thanks to the numerous students-exchange programs around the world.

Indeed, this work is classified under Action Research since the researcher is the teacher undertaking the experience of putting students in cooperative groups, and letting them

interact, focusing in the study on the cultural side of human interaction. The whole classroom where cooperative learning was implemented included 38 students, among whom three are Turkish and their ages range between 21 and 24 years old. They came to Algeria to study English thanks to a Turkish-Algerian students-exchange program.

In each session where students worked cooperatively, the teacher used to move in the class to assist students whenever her help was needed (Johnson & Johnson, 1989). Therefore, the first easy-to-use research instrument was an unstructured participant observation. The researcher took notes about all the sorts of behavior noticed in the cooperative groups where the Turkish students used to work, in addition to the topics discussed beyond the academic classroom assignment provided by the teacher. On the other hand, the second research instrument was a structured questionnaire conducted with the whole class. This questionnaire, indeed, included 11 of all the three types of questions: Open-ended, close-ended, and multiple-choice questions (Burns, 1990)

The researcher opted for a mixed-methods approach, through which data were analyzed both qualitatively and quantitatively. However, at the end of the “data analysis” part of research, the researcher noticed how dominant the qualitative approach was, due to the nature of the topic(Cohen, 1990).

Results of the observation as well as the questionnaire revealed specifically how helpful working cooperatively was to help students engage in discussions about the Algerian as well as the Turkish culture. Students, then, had the chance to know their peers individually, rather than relying on racial or ethnic stereotypes. Algerian students, in their turn, could learn how to speak about the “self”, rather than being just a “receiver” of facts about other cultures. Without forgetting how stronger the student-student relations and interactions became; within the cooperative groups.

What this research revealed can be related to what Kathleen Melville (2012), a high school teacher and a researcher in the field of cultural studies, said about her interview with her students who study in a multicultural high school “these studies cited several factors that helped them to form and maintain their cross-cultural friendships. One was the experience of working in small groups on class assignments. In fact, all three pairs identified group work as a crucial opportunity that allowed them to meet and get to know someone out of their typical circle of friends”. Accordingly, it is worth reiterating again that cooperative learning proved so much positive influence on different sorts of students and classrooms, which makes it fair to suggest it as a teaching approach in multicultural classrooms.

**Keywords:** Teaching EFL, Cooperative learning, Culture, multicultural classrooms.

## A Current Approach to Education: Flipped Learning Model

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In this age of information and technology very rapid and significant changes occur in all areas of life. In a short period of time, new information as much as the information produced in the history of humanity, can be produced and spread very quickly throughout the world. These changes have direct or indirect implications for the field of education. In our rapidly changing world, the meanings attributed to the concepts of education, teacher, learner, learning process and expectations from educational process are also changing. In other words, educational paradigms are shifting (Yeşilyaprak, 2008). As a result of these changes and transformations, learners' needs are changing and transforming. In recent years new models of learning are suggested and become widespread as respond to these needs. One of these models, which has started to become widespread in recent years, is "Flipped Learning Approach."

**Purpose:** In this review study, changing perspectives toward teaching and learning process, the need for new learning models will be discussed and as a part of these discussions "Flipped Learning Model" will be handled. In this context, the emergence and development of the model will be described; guidelines and application forms of the model will be discussed. Moreover, effectiveness, advantages and limitations of the model will be discussed within the context of relevant literature and an evaluation about the model's applicability in Turkey will be carried out.

**Methods:** This research is a review study, based on literature review and making some suggestions on the topic of Flipped Learning Model.

**Findings:** The researchers (Kern ve Rubin 2012) and organizations (OECD, 2008), generating ideas on the subjects of "the future of learning" and "learning for the future", lay emphasis on the topics of "personalization of the learning process", "using of information technologies" and "the redefinition of the learning process." As a new model in the context of this quests; "Flipped Learning" is defined as a "pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter." (Yarbro, Arfstrom, McKnight, McKnight, 2014). Within this context, what is often defined as "school work at home and home work at school" (Lage, Platt, Treglia, 2000) does not cover the range of Flipped Learning approach sufficiently. On the other hand, "flipped learning" as a concept, can be mixed with concepts like online and virtual classrooms blended or distance learning. In this learning approach, too, the course content is transmitted through digital technology. However, in addition to this, students are decisive of and subject of learning process instead of being object any more. With this aspect, this approach contributes

to the transformation of teacher centered learning to students centered learning, as well as helps to balance the needs of including students' habits of using technology into learning process and maintaining face to face interaction which are important for the millennial generation.

**Conclusion :** Flipped model is a new learning model which has started to spread throughout the world and was found as effective by various research results. Since the model has emerged recently, there is not yet agreement on many issues and there are various forms of applications.

On the other hand, there is a almost common agreement on some components of the model such as; taking direct instruction out of class, using active learning strategies and utilization of educational technology. The Flipped Learning Approach has been applied in different settings and its effectiveness in different fields of education, such as nursing, engineering, mathematics, physics, biology, chemistry, has been demonstrated by various research results (Deslauriers, Schelew ve Wieman, 2011; Baepler, Walker, Driessen, 2014; Mok, 2014; Gaughan, 2014; Bristol, 2014). However, this approach is almost unknown and there is no study related this subject in Turkey.

**Suggestions:** It is though that, it will be beneficial to working on this approach which is becoming widespread and addresses changing needs and perspectives in the field of education throughout the world. Besides, since the concept is relatively new, there is also a need to put effort forth a concept corresponding to this approach in Turkish language.

**Keywords:** flipped learning, future of learning

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## **An Evaluation of Effective Teaching Characteristics of Instructors According to Students' Opinions (Mugla Sitki Kocman University Sample)**

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Universities are the highest educational institutions of a country. In order to train qualified people that a country requires for continuing development, there has always been a great need for education institutions. Information should be produced by people and it should also be transformed into technology so as to survive and compete in the contemporary world. On that sense, while universities are producing information on the one hand, they also have a significant task in training qualified people. In performing this task, instructors working in universities have an important role. Characteristics of the instructors working in universities, which have such a substantial task in training individuals, directly affect the development of students. Therefore, in order for the instructors to conduct their teaching professions efficiently, it is considerably important that they possess effective teaching characteristics.

Effective teachers can be regarded as “individuals thinking, questioning, criticizing, open to innovations, renewing themselves continuously and loving their professions” (Kavcar, 1999). So as to train qualified and well-educated individuals, instructors working in the universities should have some special qualities such as personal characteristics, general knowledge, communication skill, classroom management ability, subject area knowledge, planning and preparation for course, knowledge of using teaching-learning strategies and teaching materials. Therefore, this study aims to investigate effective teaching characteristics instructors possess who work in different faculties and departments of Mugla Sıtkı Kocman University and evaluate them according to students' opinions in terms of some variables.

This study is designed in descriptive survey model since it aims to reveal the current condition of instructors about the effective teaching characteristics they possess. Descriptive model (survey model) is a type of research approach that aims to describe a current or past situation as they are. In such researches, cases and situations are investigated in detail and these researches are generally known as survey researches (Erkuş,2005). Participants of the study consist of the students in faculties of Education, Arts and Science, Economic and Administrative Sciences, Aquaculture, Tourism, Technical Training and School of Physical Education and Sports in Mugla Sıtkı Kocman University. In data collection of the study, “Effective Teaching Characteristics Questionnaire”, developed by Sen and Erisen (2002) is used. The questionnaire is a type of 5 point Likert scale and it contains 95 items. In addition, the questionnaire has 9 sub-dimensions namely personal characteristics, general knowledge, communication skill, classroom management ability, subject area knowledge, planning and preparation for course, knowledge of using teaching-learning strategies and teaching materials and knowledge of assessment and evaluation. The questionnaire was formed in order to be applied to both teachers and students. Cronbach's Alpha reliability of the questionnaire is calculated as .96 when it is applied to students. The data obtained from the study is analyzed

by using SPSS 18.0 package software. In the data collection process, firstly it is checked whether the participants show a normal distribution or not in terms of variables. As it is determined that the participants show a normal distribution in terms of variables, t-test is applied when there are 2 variables and more than 2 variables, one-way Anova test is applied. Moreover, when there is a significant difference in one-way Anova test, Scheffe test is used in order to determine between which groups this difference is observed. The significance level is accepted as .05 in all the statistical process. According to the results of the study, it is expected that the students will express their instructors' effective teaching characteristics are sufficient. In addition, it is also expected that there will be differences in the opinions of students about their instructors working in different faculties and departments in terms of personal characteristics, general knowledge, communication skill, classroom management ability, subject area knowledge, planning and preparation for course, knowledge of using teaching-learning strategies and teaching materials and knowledge of assessment and evaluation. As the findings and results parts of the study are being prepared, according to the findings of the study, results will be discussed and suggestions will be made.

**Keywords:** effective teaching characteristics, university students, instructors.

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## Who Has Got the Right to Construct?: The Role of Researcher in Educational Sciences

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The aim of this paper is to evaluate the interventions and restrictions on the freedom to “construct” of the researcher in terms of current research paradigm in social sciences.

Basically there are two different research approaches in social sciences: Quantitative and qualitative designs (Punch, 2005). As the dominant research paradigm, the quantitative research approach is a more “current” “goods”/“product” and a more prevailing “tool” since it has a more functional use value in the culture of consumption in the academic world. Also, it is an easier, more practical and a more “secure” way to collect, analyze and discuss data in quantitative approach if the positivistic academic tradition is taken into consideration. In the quantitative approach, researcher runs the procedure of collecting data; s/he is not a participant of this process. So, it is considered as more “objective” and studies which are conducted via this research tool are seen as more “scientific”, get published quite easily and provide a status and a good score for its author. Because of these reasons, there are more “takers” for quantitative research design.

However, when we speak through the view of the culture of consumption, there is one more reality that we are face to face is the fact that the market needs new products. Academic world is also a part of this reality. Necessity to produce publications and the demand for new goods establishes a ground for “lodgment”. New concepts and conceptions are essentially different versions of the previous ones. In order to get and keep a rich product assortment, it is an obligation to keep the system alive. So, research approaches have to be varied. From this perspective, qualitative methodology which is not totally rootless and is being used in anthropology and sociology has a new role. Actually this is a “Retro” movement. (Retro is style that is consciously derivative or imitative of trends, modes, fashions, or attitudes of the recent past) ([https://en.wikipedia.org/wiki/Retro\\_style](https://en.wikipedia.org/wiki/Retro_style)). However, “modern”/“contemporary” touches which we can see in Retro movement are the necessary interventions which shows the movement is Retro. Since there are still “modern” touches which we can define as “positivistic”, the qualitative approach in which researcher is seen as a data collector and analyzer can not be operated effectively in terms of accomplishing the rules of the design. The approach that is known as mixed methods research design is a procedure for collecting, analyzing, and “mixing” both quantitative and qualitative methods in a single study (Creswell ve Clark, 2010). In this procedure, it is tried to be realized this aim at macro level. Some qualitative research designs are at micro level; meaning, they do not give full authorization to researcher for collecting and analysing data. So, product of this new research paradigm is looking from the top to the “old” product in a hierarchical manner.

Obstacles related to the fact that qualitative research design is not used in a powerful way covers technical inadequacies of the approach. The most important of them is “language”. Using language effectively as a tool of analysis and discussion is an absolute necessity in qualitative research. Furthermore qualitative design needs language and words, because phenomenon should be described and explained. (In fact, in order to understand the

phenomenon we need language.) However, the academic conjuncture in which we experience is the one that descriptive power of language is getting weak; we only use its slogans.

Another practice which has a paradox in terms of use of qualitative research in educational sciences is related to academic tradition in which constructive paradigm is justified in instruction and training, on the contrary an orthodox behaviourism as a research paradigm has been adopted. Constructivist approach is the current official paradigm in Turkish educational system. It is a theory of knowledge that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas. Knowledge can not be transferred to mind, so creating learning situations and contexts for learners is important for them to construct knowledge. We see that even young learners in the schools have been recognized as subjects who can construct their own knowledge, however researchers do not have the same right. This paradox we experience in educational sciences has to be studied and understood well first by scholars in the field.

**Keywords:** Research approaches, research design, qualitative research, constructivism in research.

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# A Critical-Creative Social Constructivist Perspective for Science Education

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**Purpose:** Our purpose is to identify, critique and respond to the issues and challenges that are both created and concealed by the dominant narrative of curriculum and educational reforms prevailing in the United States and other countries. We describe the context and tacit assumptions, then advance a deeper analysis from the philosophical anthropology of education, i.e., from assumptions about what it means to be human to considering how humans should relate to each other, including making decisions together. This more theoretically robust constructivist perspective is both critical and creative in (a) providing more insight into the implicit and explicit dangers of the form of knowledge privileged in contemporary education and (b) offering viable educational alternatives that diminish threats of ecosystem extinction and offer greater potential for socially just and sustainable democracies (Bentley 2013; Fleury & Garrison, 2014).

**Method:** Our methodology primarily employs a philosophical/anthropological description, classification, and analysis of educational practices and policies, followed by an interpretation of the implications for current educational thinking, practice, and policy-making. Many forms of constructivism have emerged over the years with different emphases (Philips, 1995). We have long promoted and advanced critical-constructivism (Garrison, Desautels & Fleury, 1997; Garrison, Bentley, Fleury, Larochelle & Desautels, 1999), a form of social constructivism that provides a set of intellectual constructs for identifying and examining the social and political consequences of the (1) *reification*, (2) *de-contextualization*, and (3) *technocratization* of school knowledge (Popkewitz, 1991). These “idols of thinking” are indicative of the degree to which educators intend to alter—or unwittingly promote—their students’ rapport au savior, that is, their epistemological relationship with the official knowledge of the curriculum. Inquiry into a curricular epistemological symmetry reveals the degree to which students’ indigenous and cultural knowledge is considered an important adaptive basis for their further learning. Finally, this analysis will assist in discerning issues and implications for the future of education.

**Findings:** Our premises include that: (a) teaching is a moral and political act (Cochran-Smith, 2004); (b) education should be about “building a more just world”; and (c) “science holds a uniquely powerful place in society” (Barton, 2003, 168). These premises emanate from, and adhere to, a critical, social constructivist perspective which acknowledges the contingent nature of knowledge and its cultural and political underpinnings.

Applied to education, all knowledge is socially constructed, but what comes to be considered official school knowledge is determined through decisions and dynamics of disciplinary, organizational, or institutional selection processes and, ergo, is political. For the U.S. and many Western-influenced societies, three main political ideologies influence this knowledge

selection process: classical liberalism, neoliberalism and neoconservatism. Our paper will describe these ideologies that under-gird the cultural narratives driving education policies and curriculum, specifically, science curriculum.

Due to the influence of one of them, neoliberalism, a rationality of deliberation has largely been replaced with one of calculation, favoring efficiency of decision-making, such as in cost-benefit studies, and test and score-driven instruction in education. In this ideology, the values, needs, and wishes of local communities are considered insignificant “externalities”. Since the mid-1980s, a combination of these dominating ideologies has reshaped the characteristics of education reforms in the U.S. and elsewhere, one of those being the ethical and political value on what it means to be a human being, on how humans should relate to each other, and how decisions affecting others (society) can and should be made together. A highly profitable education industry has arisen to address a claimed need for greater student and teacher accountability, so what we have is a lot of statistical reliability but no demonstrated educative or social validity (Ravitch, 2013). Furthermore, the commodification of formal school knowledge for the purposes of testing and standards has solidified content borders into hardened boundaries, thereby reifying the world’s official knowledge for students, discouraging their creation of conceptual or material relationships through critical questioning, inquiry, problem-posing, and other similar activities.

**Conclusions:** There is a significant mis-match between the currently sanctioned ideological education and the state of the world, beset with climate change, environmental degradation, ecological carrying capacities stressed by population growth, rapid technological change, and global economy. The important educative task for our time is educating students for democratic citizenship in a new social-ecological era, and one that involves creating a school culture that lets students in on the knowledge game. That requires applying the principle of epistemological symmetry, extending respect for the local knowledges of the classroom community and revealing science as a human endeavor.

**Suggestions:** Our paper addresses educating students for democratic citizenship in the new reality. In teaching science, obstacles to addressing the task include the processes of reification, decontextualization, and technocratization of scientific knowledge. Curriculum content will need to be addressed, including, for example, the nature of science. Didactic methods will need to give way to student-centered approaches, such as problem-based learning.

**Keywords:** epistemology, constructivism, curriculum, social justice, educational reform

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## A Constructivist Activity in Psychomotor Learning Area on Teaching Mathematics: Vocational High School Case

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Schools mostly work to make students gain knowledge, and unfortunately, attainments of skills tend to be ignored. The reflection of knowledge on human life is possible if knowledge is integrated with skills (Biggs, 1996). In the absence of a skill, knowledge remains as burden in mind, particularly in Applied Sciences (Brooks and Brooks, 1999). In addition to cultivating notions, we aimed to develop some basic skills regarding learning and using Mathematics effectively (MEB, 2013). The aim of the present research is to investigate the effects of activities, which have been prepared for the psychomotor learning area, targeting students in the Vocational High School to compensate for the students' shortcomings. In addition, more effective applications of Mathematics in daily and professional life are aimed with a sample application. The effect of application of constructivist and applied Mathematics lesson for Vocational High School students will be identified, and this cultural lesson as the use of applied Mathematics and the area for the use of Mathematics in real life will be taught, which is different from the theoretical teaching. The expected gains and attainments in the study are the awareness among students concerning the benefits of Mathematics, internalization and also elimination of the question '*Why are we learning this?*'.

**Method:** As a qualitative study, action research was used in this study. According to Wiersma (2009), action research is examination process of participants' (i.e., teachers and researchers) educational applications systematically through using research techniques. Patton (1988) states that action research is a way of research in which the participants who are in social sciences; (i) their own social and educational applications, (ii) understanding these applications and (iii) reflective research with the aim to increase the rationality and accuracy of contexts in which these applications' implementations (as cited. Köklü, 1993, 357). The problem was identified through the determination that both researcher and teacher who were working with students for a long time and identified those students who had challenges with Mathematics. The study was conducted on 29 students who are studying in the Vocational High School. The inclusion criteria for the study participants was that students who had weak process of thought in Mathematics that were found as a result of examinations (MEB, 2006). The study started with the idea that students' distance from Mathematics was a disadvantage. However, the preliminary results showed that students' disadvantageous case in Mathematics changed in a positive way through the application in the class that was designed for the psychomotor skills. Based on the constructivist philosophy, the education was provided on the triangle through studying similarity subject. The activities that were performed in the Mathematics course were designed by 3 experts and one pilot application was conducted by 4 PhD candidates in Mathematics to make the necessary corrections and modifications. Before and after the research, students' opinions regarding Mathematics course were identified to find out the effectiveness and benefits of the application employed.

**Findings:** The study findings revealed that on the activity subject students' success increased concerning similarity subject. Considering the course content and stream of activities in Mathematics, students' opinions were favorable. Students had an opportunity for application of the subjects in their life that they learnt in Mathematics course and students gained knowledge and awareness concerning how to benefit from Mathematics in terms of similarity topic in real life. In addition, the awareness they gained can indicate as a significant improvement of the integration of knowledge and skill.

**Conclusions and Suggestions:** As a result, the outcome of the activities that paves for the students' use of psychomotor skills showed a statistically significant increase regarding the success in Mathematics. In the stage of beginning the activity application, none of the students' groups associated the basic rule of similarity (i.e., Thales Theorem) with the activities they were asked to perform, and could not start the activity. Students' low success in the pre-test and anxiety in the beginning of the activity showed that students did not make sense of the knowledge gained, without commenting and making deductions, students thought that memorizing the knowledge was sufficient. With lesson plans and programs of instruction through grounding on the constructivist learning approaches in Vocational High School, the shortcomings of students' educational attainment will be addressed. From our point of view, similar activities conducted in the context of the present study can be performed to teach other concepts in Mathematics in Vocational High Schools worldwide. Teachers in the Vocational High School, who are assigned to make a change in students' behavior and to make students successful, through considering students' needs, must prepare activities that will provide students with active participations in their learning in the learning process and also teachers must apply the activities. It is significant that teachers who will perform these activities may need to have additional training or do more work. The curriculum of Vocational High School should be renewed, and teachers' training should be supported by the Ministry of National Education.

**Keywords:** Constructivist Learning, Psychomotor Learning, Rethinking Education.

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# Overconfidence in Classroom and Its Effects on Field of Study

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There is almost consensus in psychology and cognitive science that people, in general, and students, in particular, tend to overestimate their relative and absolute abilities (Falchikov and Boud, 1989). Overconfidence of students reflects itself as expecting higher grades in courses and misevaluating their selfperformances. A question of interest is whether misconfidence of students, if there exists, affect the primary step of their future career: the choice of field of study. Another related question is if there is a relation between students' overconfidence level and their performances in courses. In this paper, we collect and analyze data to address these questions. Our results suggest that many of the students exhibit overconfidence. Moreover, overconfidence of students is reflected to their choice of field of study. Our results also confirm that students' overconfidence is negatively and significantly related to their course performances.

A vast of papers theoretically and empirically investigated effects of overconfidence on labor market outcomes (Goel and Thakor, 2008). However, only few papers analyze the impact of overconfidence on early career choices. The closest paper to this study is Schulz and Thoni (2014). The authors analyzes differences in students' confidence levels across fields of study. Their results show that while students from Engineering, Medicine and Humanities do not present overconfidence, students graduating in Political Science, Law, Economics and Business Administration are overconfident. Our paper adds to this literature by providing further evidence on that there is relation between field of study and overconfidence in general, however, our paper differs from Schulz and Thoni (2014) by showing that the exact effect of overconfidence on the field of study may differ from which is suggested in Schulz and Thoni (2014).

Our paper is also related to the education psychology literature and to the literature of student motivation in education sciences. In education psychology, researchers argue that incompetence of unskilled students may prevent them to realize their incompetence and as a result, they more overestimate their skills (Grimes, 2002). In the literature of student motivation, Seifert (2004), Dunlosky and Rawson (2012) suggest that students' overestimation of their grades lowers their course performances. Our study supports and adds to both of those literatures by showing significant and negative relation between students' overconfidence levels and their exam performances.

## Methodology

We conducted our study with 239 of students who take the course of Ataturk's Principles and History of Turkish Revolution at Gebze Teknik University. 51 students from Business Administration, 58 students from Computer Science, 33 students from Biology, 14 students from Architecture, 27 students from Materials Science and Engineering and 35 students from Electronic Engineering entered the exam. These students are asked five questions related to

the general knowledge of the course and they are also asked to predict the number of questions they have answered correctly. Following the related literature, we measured overconfidence as the positive differences between each student's expected number of correct answers and the actual number of correct answers in the test.

To analyze the collected data, we used a Logistic Regression to test whether the field of study, the competence level of student, which is measured as the number of given correct answers, and gender have explanatory power on the overconfidence level of a student. To check robustness of our results, we tested same hypothesis by using Ordinary Least Squares and Probit analyses.

## **Results**

Our first result indicates that approximately %32 of students overestimate their exam performances. Moreover, all of three analyses showed that while graduating in Business Administration, Computer Science, Biology and Electronic Engineering does not have significant effect on the level of overconfidence, students from Architecture and Materials Science and Engineering present less overconfidence compared to the sample average. Thus, our results provide evidence for that confidence level and the field of study is related. Further, we examined whether students, who perform worse in the exam present higher-level overconfidence. We established that a decrease in the number of correct answers increases the level of overconfidence.

## **Conclusion and Suggestions**

We found that overconfidence of students affect both their field of study and their course performances. These results imply that overconfidence of students may have important consequences on both their current performances in courses and future career paths. For further research and policy orientation, questions of what factors lead overconfidence of students and how different teaching strategies influence it should be researched.

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**Keywords:** overconfidence, judgment accuracy, field of study, student performance

**THEME 9:**  
**New Approaches in Measurement and Assessment**

# Effects of Calibration Sample and Bank Size on Ability Estimation in Computerized Adaptive Testing

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IRT requires very large calibration samples for accurate item parameter estimation (Hambleton, 1989). Although it may not constitute a serious problem for a test publisher with almost unlimited resources to obtain large calibration samples, it might not be a feasible option for an individual researcher working for educational institutions. Considering that it is arduous for educational researchers to obtain large examinee groups that embody the characteristics of the target examinees to pretest items, there is a need for a study that investigates the feasibility of using small sample sizes to calibrate items in a bank and its effects on ability ( $\theta$ ) estimation in computerized adaptive tests (CAT). Accordingly, the purpose of the present study was to investigate how  $\theta$  estimation in 3PLM CAT was affected by calibration sample size. Moreover, as the number of items in the CAT item bank was thought to be another source of high cost in CAT development, the effects of calibration sample size on  $\theta$  estimates was investigated conditional on the bank size.

## Method

The full data set of the present study was simulated in the 3PLM using a Monte-Carlo simulation procedure with a uniform distribution of  $\theta$  parameters between -3 and +3. The item discrimination ( $a$ ), item difficulty ( $b$ ) and pseudo chance ( $c$ ) parameters were also generated from a uniform distribution ranging between 0,5 and 1,5, -3 and +3 and 0,00 and 0,25 respectively. As a result, a data set of 10.000 examinees and 500 items was obtained.

From the full item bank with 500 items, items for the medium (300 & 200 item) and small (100 item) length banks were selected. As a result, three data sets of 500, 300, 200 and 100 items and 10.000 examinees were formed using the selected items and original (simulated) responses of the examinees. Then, the  $\theta$  levels of the individuals were used as strata and calibration samples of  $n = 150$  (Harwell & Janosky, 1991), 250 (Goldman & Raju, 1986), 500 (Akour & Al-Omari, 2013; Hulin, Lissak & Drasgow, 1982), 1,000 (Goldman & Raju, 1986; Hulin et al., 1982), 2,000 (Hulin et al., 1982), 3000 (Tang, Way & Carey, 1993), and 5000 (Akour & Al-Omari, 2013) tested in previous research on IRT based calibration sample size and samples that were uncommon (350 & 750) in the previous research were drawn from each data set.

After the item selection and sampling procedure, the 3PLM parameters of the items selected for the smaller banks were re-estimated using the calibration samples drawn and the estimated item parameters from these samples were used as the known parameters of the items in the banks. Then, the full data sets with 10.000 examinees and 500, 300, 200 and 100 items obtained after the item selection for the smaller banks and the item parameters calibrated using 36 different samples were used in the post-hoc simulations.

The  $\theta$  estimates obtained after post-hoc simulations were compared to the true  $\theta$  of the examinees. In order to evaluate the estimation accuracy, correlation coefficients (Hulin et al., 1982), root mean squared difference (RMSD) (Harwell & Janosky, 1991) and average signed difference (ASD) were calculated.

### **Findings**

In the present study, highly correlated and accurate  $\theta$  parameter estimates were obtained even in research conditions in which a calibration sample of 150 examinees was used. Moreover, an item bank of 100 items could function as successfully as the item banks with as many as 500 items, especially at certain  $\theta$  levels, depending on the information pertaining to those  $\theta$  levels in the banks. Moreover, in most situations in the present study, the 300-item bank served as well as 500-item bank.

### **Conclusion&Suggestions**

The results indicated that the  $\theta$  estimates in CAT were robust against the calibration sample size and the bank size, especially when the item bank had high information matching the target examinee  $\theta$  levels. A calibration sample of 150 examinees might be feasible to calibrate items for use in a CAT item bank. Moreover, an item bank of 200 high quality items at certain  $\theta$  levels could also be useful for many purposes. These results contrast with the findings of prior research that suggested that sample sizes of 1,000 or more were needed to accurately estimate item parameters. Apparently, whatever errors occur in item parameter estimates as the result of small samples and/or small item banks do not have a large influence on the person parameter estimates that result from CAT administration.

The findings of the present study have some implications for future item bank development in various disciplines. They provide an empirical basis for CAT researchers, decision makers, educational planners, and educational institutions in countries where funding sources are limited and finding large numbers of examinees to calibrate items while developing an item bank for CAT is difficult.

**Keywords:** Computerized adaptive testing , Item response theory , Pre-test calibration sample size, Ability estimation accuracy

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## **Assessment of Performance-Based Tasks within the Context of Statistics Lesson with Multi-Faceted Rasch Model**

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It is named as performance that the product or the effort generated as a result of completing a task or an activity which generally requires high order cognitive process (Kutlu, Doğan ve Karakaya, 2010). It can be thought that the biggest role of measurement and evaluation is to measure students' performance in-class or out of class. It can be said that it is common to use the behavior, named as low level behavior of performance, gotten in the level of remembering alone in schools. Considering higher education, it is clear that traditional measurement tools such as short answer, filling the blank, multiple-choice questions are not enough to evaluate high order cognitive skills and acquisitions aimed (Berberoğlu, 1988; White, 1999; Wiliam, 2003, Baştürk, 2008; Akt. Baştürk 2010).

The studies for measuring higher order thinking skills with the aim of providing development of students' success are defined as "performance-based assessment studies" (Kutlu, Doğan ve Karakaya, 2010). Therefore it can be beneficial to use performance based assessment for complex skills requiring high level thinking. Rubric is the one of the most favorite measurement tools in this kind of assessment. A well-designed rubric with its content composed of criteria and performance levels not only decreases possible bias during rating, but also provide opportunity students for giving more detailed and realist feedbacks themselves (Parlak ve Doğan, 2014). In addition to what is mentioned above, during assessment process, it can be said that students' measuring their performance positively contributes to learning process. According to Noonan and Randy (2005) and Randy (2006), self-assessment is defined as students' evaluation of their own studies during learning process in accordance with predetermined criteria and giving their own decisions about their learning (Akt. Kutlu, Karakaya ve Doğan, 2014). The biggest common disadvantage of measurement tools rating by human raters is differentiation in scores. This problem threatens interrater reliability. Since a rater can give one to performance while another one gives two to the same performance. This affects negatively decision process. There are some methods to solve this kind of problems. The most important one among them is multi-faceted Rasch model (Güler, 2008), recently popular in our country. Many-Facet Rasch Model (MFRM) by Linacre (1989) is an extension of the Rasch Model (1960). It is a unidimensional and compensating mathematical model that places scores of the object of measurement (e.g., examinee) along with the other facets (e.g., item difficulty, rater severity) on the same scale which allows conveniently for separate and invariant parameter estimates, and equal-interval scale for the measurement (Linacre, 1993).

When searching literature, it can be seen that using multi-faceted Rasch model to assess performance is really common, especially abroad, and usage of it can be beneficial (Hetherman, 2004; Farrokhi, Esfandiari ve Dalili 2011; Nakamura 2002). Considering few studies about this subject and necessity for more study in this topic in our country, this study aims to assess performance based tasks prepared in order to see university students' theoretical and practical acquisitions in statistics lesson with multi-faceted Rasch model.

In this study, descriptive research technics are used. The aim of descriptive researches is to portray generally a state related to research topic in past or now in detailed way (Büyüköztürk vd., 2013, s.14; Karasar, 1998, s.77).

Target group in the study consists of 34 second grade students, taking statistics lesson, from Psychological Counseling and Guidance Department in Education Faculty of Gazi University. Performance based tasks in statistics lesson are developed by the lecturer giving the lesson. And rubric is prepared in order to rating them. Validity and reliability of the tools are tried to provide by expert opinion technic. After students will rate themselves with the rubric, three lecturers will rate the same tasks with them. It will be essential that student must be eager. Each lecturer rater will be degree of expert in measurement and evaluation department.

For analysis of the research, multi-faceted Rasch model will be used. And for estimations in the model, FACETS software will be used. The studies of analysis are continuing. After analysis, results and findings will be interpreted. For suggestions about this study, it can be said that this study can be applied for a larger group, and for an assessment method, researchers can use peer assessment method. After finishing analysis, according to results and findings, suggestions can be developed, and will be commented in a detailed way.

**Keywords:** Multi-faceted Rasch model, performance assessment, self assessment, interrater reliability.

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# Equating TIMSS Mathematics Subtests with Nonlinear Equating Methods Using NEAT Design: Circle-Arc Equating Approaches

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The purpose of this study is to equate Trends in International Mathematics and Science Study (TIMSS) mathematics subtest scores obtained from TIMSS 2011 to scores obtained from TIMSS 2007 form with two different nonlinear observed score equating methods under Non-Equivalent Anchor Test (NEAT) design where common items are used to link two or more test forms. The ultimate goal is to determine whether different forms of mathematics tests that administered in different years with anchor (common) items caused any inequalities with respect to students. In addition, results obtained from different equipercentile equating methods were compared to a new nonlinear equating approach called as circle-arc equating method in order to see which method is the most appropriate for equating these forms.

## Method

In this study, data from TIMSS 2011 and TIMSS 2007 mathematics subtests which was administered to eight grade Turkish students were used. Raw scores obtained from TIMSS 2011 mathematics subtest booklet 12 were equated to TIMSS 2007 mathematics subtest booklet 5 with two different nonlinear equating methods including equipercentile equating and circle-arc methods under NEAT design. TIMSS 2007 mathematics subtest booklet 5 was administered to 323 students and TIMSS 2011 mathematics subtests booklet 12 was administered to 495 students. Both booklets contain 23 dichotomous items and 7 out of 23 items are common anchor (common) items. For equipercentile equating, two different equating methods named as “frequency estimation” and “chained equating” were used, while for circle-arc method, four different equating methods named as “Tucker”, “Levine”, “Braun-Holland” and “chained equating” were used, respectively. In addition, observed scores that obtained from both forms were presmoothed before equating in order to examine effect of presmoothing on different equating methods. The results of different nonlinear equating methods were compared with respect to Root Mean Squared Error (RMSE) index, mean of bootstrap standard errors (MBSE) and mean of bootstrap bias. The R software (3.11) was used to conduct equating analysis.

## Findings

Before conducting the analysis, assumptions of equating, such as unidimensionality and equal reliability, were checked and fulfilled. Reliability and factor analysis results indicated that both tests were unidimensional with one dominant factor, and the test reliabilities were equal. The results of equipercentile equating showed that equivalent scores of TIMSS 2011 mathematics subtest ranged between -0.38 and 23.08. However, when raw scores were presmoothed, equivalent scores ranged between 0 and 23.08 which implies that equipercentile equating with presmoothing yielded more accurate result. On the other hand, the results of different circle-arc equating methods showed that equivalent scores of TIMSS 2011 mathematics subtest ranged between 0 and 23 for both raw and presmoothed scores. This indicates that equivalent score interval remained same with circle-arc equating methods. Therefore, it can be concluded that circle-arc equating method yielded more accurate results compare to equipercentile equating method.

All raw scores of TIMSS 2011 mathematics subtest were smaller than TIMSS 2007 mathematics subtest equivalent scores based on circle-arc equating results which indicates that there was a linear relationship between TIMSS 2007 mathematics subtest raw scores and TIMSS 2011 mathematics subtest equivalent scores, and TIMSS 2007 mathematics subtest was easier than TIMSS 2011 mathematics subtest along the score scale. On the other hand, there was nonlinear relationship between raw scores and equivalent scores obtained from equipercentile equating method.

Results of different equipercentile equating and circle-arc methods were compared with respect to Root Mean Squared Error (RMSE) index, mean of bootstrap standard errors (MBSE) and mean of bootstrap bias. When different methods based on equipercentile equating were compared, chained equipercentile equating method with presmoothing yielded smaller MBSE (0.905), RMSE (0.051) and bias (0.897) statistics and outperformed the frequency estimation equipercentile method. On the other hand, Braun-Holland circle-arc equating method yielded smallest MBSE (.231), while chained circle-arc method yielded smallest RMSE (0.028) and bias (.0561) values respectively. In general, circle-arc equating methods outperformed equipercentile equating methods and presmoothing decreased MBSE, RMSE and bias values substantially for both methods. Therefore, chained and Braun-Holland circle-arc equating methods with presmoothing are the most appropriate method for equating these two forms.

### **Conclusion and Suggestion**

Large scale testing such as TIMSS requires administering different forms each period of time since traits being measured remains same. However, educational testing services must take into account the psychometric and practical issues that may cause inequalities and biased measurement. This study aimed to check statistical equivalence of TIMSS mathematics subtest test administered different years and to determine the most appropriate nonlinear equating method.

The results indicated that the new circle-arc methods outperformed the equipercentile methods and yielded more consistent results with smaller MBSE, RMSE and bias values. In addition, when observed scores were presmoothed, MBSE, RMSE and bias values associated with both equipercentile equating and circle-arc methods were decreased substantially. Equivalent observed scores obtained from circle-arc equating methods had least standard error, RMSE and bias statistics regardless of methods being used. The similar studies (Butler and Hanson, 1997; Zhu, 1998) yielded the parallel result. Hanson, Zeng and Colton (1994); and Kelecioğlu and Öztürk (2013) found that presmoothing and postsMOOTHING improved estimated equipercentile function and reduced equating error in random group design.

Finally, there was a nonlinear relationship between equivalent scores of TIMSS 2011 mathematics and raw score of TIMSS 2007 mathematics subtest. Equating results indicated that TIMSS 2007 mathematics subtest was easier than TIMSS 2011 mathematics subtest along with the score scale and, nonlinear presmoothed Tucker and Braun-Holland methods based on circle-arc equating were considered to be the most appropriate equating methods for TIMSS dataset since they yielded the least standard random error, bias and RMSE coefficients.

Results of this study indicate that different methods based on circle-arc equating outperformed the other nonlinear observed score equating methods based on equipercentile equating. . In this study real data set obtained from TIMSS mathematics subtests were used. However more research should be conducted in order to see how different conditions, such as

different sample sizes, equating designs and postsMOOTHING, affect the circle-arc equating methods. Moreover, it is suggested to compare the performance of circle-arc equating methods with other linear observed and true score equating methods.

**Keywords:** TIMSS, Equating, Circle-arc Equating Methods

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# Using R Software for Data Analysis in Social and Educational Sciences

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There are many statistical package software that can be used for analyzing data in quantitative studies. Among those package software R has become popular since it has some advantages. R is a free software environment for statistical computing and graphics. Unlike many other software companies that protectively hide away the code on which their software is based, R is an open source software. In R it is allowed to access the code of a specific analysis. This allows everyone to contribute to the software. So capability of R dynamically expand because people from all over the world contribute to it (Field, Miles, Files, 2012). It is also possible to download some packages for specific statistical analysis. The basic of R software depends on the “S” language developed by Becker and Chambers. It is expanded version of commercial software called S-PLUS (Er & Sönmez).

Beaujean (2013) emphasizes three important advantages of R. One reason is that it is a very powerful programming language that allows conduct a wide range of quantitative analysis. Second reason is that it allows users to submit their own packages to the R server for anyone to use. As a result of this today there has been more than 4000 statistical packages. It is very easy for a user to download the required package and conduct the analysis. A third reason for using R is that it is a free open source.

R has three different mode that the user can select. The first one is the batch mode. It is best when the analysis requires massive computing power. Second mode includes a graphical user interface. R commander is an example of this kind of modes menu-driven options are similar to those from SPSS.

Third one is the most popular is called interactive mode. When the user submits the syntax, **R** will parse the syntax immediately and deliver the output the user requested (Beaujean, 2013).

**Aim of the Study:** Although R software has very advantages, it is not commonly used in Turkey for quantitative data analysis unlike some other countries. It is not known well by the researchers in Turkey. The aim of this study is to explain the usage of R in social sciences and define how frequently it is used in scientific studies in Turkey. Below are the research questions;

1. How frequently R software has been used in the quantitative studies published in Turkey?
2. How frequently other commercial statistical software has been used in the quantitative studies published in Turkey?

## Methodology

**The research Model:** This is a survey type of study which aims to define frequency of statistical software used in quantitative studies published in Turkey.

**Sample:** The required data collected form 1627 articles which were published in Educational Science: Theory and Practice, Education and Science, Hacettepe University Educational Faculty Journal from 2010 to 2014.

**Data Analysis:** 1627 articles have been examined and categorized according to the statistical software that is used for quantitative data analysis. Then the frequencies and percentages have been calculated for each statistical software. Percentages of using statistical software have been compared according to the years.

**Findings:** Analysis of the data shows that out of 1627 articles published in three journals between 2010-2014 in Turkey, 495 of them are not required to do quantitative data analysis. They are mostly qualitative studies. So the rest 1132 quantitative studies require usage of statistical software. So 1132 articles have been categorized and analyzed according to the statistical software that is used for quantitative data analysis. Table given below shows frequencies and percentages according to the statistical software program used for quantitative data.

Software	Years											
	2010		2011		2012		2013		2014		Total	
	f	%*	f	%*	f	%*	f	%*	f	%*	f	%
SPSS	53	37.4	66	32.5	94	36.3	117	40.8	85	35.3	415	36.7
LISREL	-	-	5	2.4	2	0.8	4	1.4	8	3.3	19	1.7
AMOS	-	-	2	0.9	3	1	2	0.7	2	0.8	9	0.8
R	-	-	-	-	-	-	1	0.4	-	-	1	0.01
SAS	-	-	2	0.9	1	0.4	-	-	-	-	3	0.3
Other	3	2.1	8	3.9	5	1.9	3	1	13	5.4	32	2.8
SPSS and LISREL	8	5.6	10	4.9	14	5.4	12	4.2	17	7.1	61	5.4
SPSS and others	5	3.5	1	0.9	5	1.93	3	1	14	5.8	28	2.5
Not defined.	73	51.4	109	53.6	135	52.1	145	50.5	102	42.3	564	49.8
<b>Total</b>	<b>142</b>	<b>100</b>	<b>203</b>	<b>100</b>	<b>259</b>	<b>100</b>	<b>287</b>	<b>100</b>	<b>241</b>	<b>100</b>	<b>1132</b>	<b>100</b>

The outstanding results of the study is that in % 50 of the articles, it is not presented the statistical software used. Another outstanding result is that in % 45 of the articles, SPSS was used for quantitative data analysis. Moreover if we ignore the articles where statistical package programs are not reported, this ratio increases to approximately % 89. On the other hand results show us that R software was very few used in the analyzed articles. It is about %0.01 of the total articles published. LISREL,SAS, Amos are also used very view for quantitative data analysis.

## Discussion and Suggestions

Results show us that while SPSS is used very common for quantitative data analysis, R is used very rare although it has many advantages. This may be result of that people may think that R is not user friendly because it doesn't have graphical interface. But in fact it is not true. Some studies and trainings should be held to introduce the advantages of R to the researchers.

**Keywords:** R, R language, Statistical Software, Quantitative Data Analysis

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# According to the PISA 2012 Results, Defining the Variables Predicted Mathematical Anxiety Whether or Not

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Programme for International Student Assessment (PISA) is a large scale assessment on education and has been conducted by OECD since 2000 at three-year period (MEB, 2015). PISA assessment includes some other student affective characteristics like anxiety, motivation, sense of belonging, attitudes and etc. as well as the following achievement and proficiency. Turkey has participated PISA since 2003. Turkey has underperformed either participant countries or the OECD countries (OECD, 2012).

One of the important characteristics of the students considered in PISA assessment is mathematical anxiety. Related literature is considering the relations between mathematical anxiety and achievement mostly. In general, individuals' success with high and low level of anxiety is low (Martin&Woltman-Greenwood, 2000). There are curvilinear relations between these variables. Although limited, there are some research on relations between anxiety and some other affective characteristics in Turkey (Akdağ, 2014; Berkdemir, Işık ve Çikili, 2004; Delice, Ertekin, Aydın ve Dilmaç, 2009; Yenilmez ve Özabacı, 2003). In this case, it's thought that anxiety can predicted by some other significant affective characteristics.

## **Purpose**

In this study, it's aimed to construct a significant discriminant model which can be separated the students with and without mathematical anxiety by using PISA 2012 Turkey Student Questionnaire (TSQ) data. Also, depending on this model, it's aimed to define related variables with mathematical anxiety.

## **Methods**

### **Research Design**

This study has been conducted as a basic research. Basic research, the simplest way of research concept, are theoretical studies that aim to add new information to the existing knowledge (Karasar, 2012). For this purpose, secondary level analyses have been conducted on PISA 2012 data.

### **Participants**

PISA 2012 Turkey population was defined approximately 1 million 15-year old students. Depending on this population, PISA 2012 Turkey sample composed of 4848 students defined according to the NUTS Level-1 and totally. This study has been limited PISA 2012 TSQ

(Form B). Secondary level analyses have been executed on 1598 student who answered this form.

### **Data Collection Tools**

PISA 2012 TSQ was organized three different forms as Form A, Form B and Form C. These forms include different questions on affective characteristics of the students. These forms have been reviewed with detailed. Greatest number of affective variables involved in Form B. It was decided to use the form B as a data collecting tool.

### **Data Analysis Techniques**

For the purpose of the formation of groups with and without mathematical anxiety, cut points have been used. Half standard deviation ( $sd=0,4826$ ) below and above of the mean of the anxiety scores ( $\bar{X} = 0,2169$ ) have been determined as cut point. Students who had scores above 0.70 have been defined with anxiety. Student who had score below -0.27 have been defined without anxiety. Middle group who had score between -0.27 and 0.70, students' anxiety levels are very close. So this group was not considered for further analyses.

After defining groups, discriminant function analysis has been performed. To define initial model variables, 57 index and standard variables on data sets was checked and analysed in the context of basic assumptions. These variables have been analysed according to normality, multivariate normality, colinearity and multicollinearity. 8 variables have been met the assumptions: (1) teacher behaviour: student orientation, (2) sense of belonging to school, (3) disciplinary climate, (4) mathematics teacher's support, (5) teacher student relations, (6) teacher behaviour: formative assessment, (7) teacher behaviour: teacher directed instruction and (8) teacher support. As can be seen, these variables are directed to affective characteristics of students.

### **Findings**

According to the result of the discriminant function analysis, a significant discriminant function with 6 affective variables could be produced ( $\lambda=103,040$  and  $p<.05$ ). Classification success of this function calculated as 64.4%. This ratio is higher than relative or random chance ratio (58.3%). Produced discriminant function has been performed well to define groups with and without anxiety.

Except 2 variables (teacher behaviour: student orientation and teacher student relations), there are significant differences between groups with and without anxiety. Also, excluding these 2 insignificant variables, classification success does not change. Therefore it has been decided to exclude these variables from model.

Most predictive variable is defined as disciplinary climate and least predictive variable is defined as teacher behaviour: teacher-directed instruction.

### **Conclusions**

As a result, students' mathematical anxiety situations can be significantly modelled with some other student affective characteristics. According to this model, (1) teacher behaviour: formative assessment, (2) teacher behaviour: teacher-directed instruction, (3) teacher support, (4) sense of belonging to school, (5) disciplinary climate and (6) mathematics teacher's support are significant predictors to mathematical anxiety.

### **Suggestions**

Inferences about mathematical anxiety of students, it's recommended that these variables should be considered as control or covariate variables. For further researches, it's

recommended that different models which don't need parametric assumptions like logistic models should use for this type of relations.

**Key words:** mathematical anxiety, PISA, discriminant function analysis, predictors

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# Item Parameter Estimation of Multidimensional Item Response Theory with Mixed-Structure

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The aim of this study is to determine how test length and sample size affect the item parameter estimations of mixed structured tests on the basis of multidimensional item response theory (MIRT). For this purpose, in this study, item parameters of a two-dimensional mixed structured large-scale test consisted of 22 items were estimated under the conditions of different test lengths and sample sizes. Benefitting from the estimated parameter values, and the values which estimated from the whole data set, RMSE values were calculated and correlations were analyzed. Besides, ANOVA was performed to analyze the effects of test length and sample size on RMSEs of parameter estimations. Based on the acquired results, suggestions related to required sample size and item number to have optimal parameter recovery from mixed structured tests were attempted to be improved.

## Problem statement

The problem statement of this research is stated as below:

“How do sample size and test length affect item parameter estimations of mixed structured two dimensional tests based on multidimensional item response theory?”

## Method

### Type of Study

In this research the parameter recovery of 2-dimensional mixed structured tests' based on MIRT are investigated in various test length and sample size conditions in terms of RMSE, ANOVA and correlations. In this respect, this study is a descriptive research.

### Research Data

In this research, Math test in PISA 2012 assessment's booklet no.1 is used. 27253 students had this booklet from the participant countries. There were 22 dichotomous items in this booklet. These 22 items were included in the study. After determining the items to be included in the study, data set was analyzed in terms of missing data. After cleaning data 8267 respondents left, who had answered all of these 22 items. The research data is obtained from these 8267 respondents and 22 items. With the aim of determining the number of factors, data were analyzed with STATISTICA program. According to the results, the data has two-factors. Data is analyzed with IRTPRO 2.1 for determining factor loadings of items, and which logistic model does the data set fit. According to the results, data fits 2PL model and items were associated with the measured dimensions based on the factor loadings. As a result, a structure, of which 14 items measure the first dimension, 2 items measure the second dimension, and 6 items measure both dimensions, was acquired. CFA was performed on the structure with LISREL 8.54, and the model was confirmed Chi Square=1463.25; sd=202; p=0.000; RMSEA=0.030; GFI=0.98; CFI=0.98; RMR=0.0036). Test length, sample size and replication number are considered as independent variables of the research. Independent variables are explained briefly below.

**Test length:** Two test lengths were determined to show the effect of test length, For this purpose, only the item number that measures the first dimension was manipulated. In the original test, 14 of 22 items measure only first dimension. In the research, number of items that measures only first dimension was considered as half (7) and the total (14) of the original test. So test length was varied as 15 and 22 items.

**Sample size:** To determine the effect of sample size on parameter estimation, data sets of 500, 1000, and 2000 respondents were randomly sampled from data set.

**Replication Number:** In the research, 25 data sets were chosen for each test length and sample size condition. Thus, similar to replication process in simulation studies, sample's capability of reflecting real situations was aimed to be increased. With the aim of testing the effects of different replication numbers on parameter recovery, the results were reported from the first 5, first 15, and 25 replications. Consequently, 18 conditions, being 2 test lengths\* 3 sample sizes\* and 3 replication numbers, were used in the study; and, related to these conditions, 150 data sets were analyzed.

### **Analysis of Data**

Item parameters of data sets were estimated through IRTPRO 2.1 program's BA-EM algorithm. RMSE values between the acquired results and the results estimated from the original data set were calculated. ANOVA was performed to observe the main and interaction effects of the independent variables on RMSEs of parameters. Additionally, correlations between the item parameters estimated from the original data set and from the samples were analyzed in the study.

### **Findings**

According to ANOVA results, the main effects of sample size and test length on RMSE value of parameter are significant. The interaction of test length and sample size has a significant effect on RMSE value of a parameter. The main and interaction effects of sample size and test length on RMSE value of d parameter significantly differ. However, no significant effect of replication number on RMSEs of parameters is found. It is observed that sample sizes on and over 1000 have significant effect on the estimation of 'd' parameters, and sample sizes on and over 1500 have significant effect on the estimation of 'a' parameters. According to the results related to test length, it is observed that the results acquired from 22-item tests indicate more stable estimation results. In general, d parameter is estimated more accurately than a1 parameter, and a1 parameter is estimated more accurately than a2 parameter. Under the same conditions, RMSE values acquired from the short test tend to be higher than RMSE values acquired from the long test. Correlation values of 'd' parameter indicate excellent relationship in all conditions. Correlations of both 'a' parameters rise with the increase of the sample size and test length.

### **Conclusion and Suggestions**

According to the results of the research, increase of the sample sizes and test lengths in mixed structured tests has a significant effect on the improvement of item parameter recovery. To calibrate mixed structured tests, sample size needs to be 1500 and over. According to the results related to the test length, 15-item tests are inadequate for item calibration. No

significant difference related to the replication results used in this study is found. For further studies, researchers are suggested to use 25 or more replication numbers.

**Keywords:** Multidimensional item response theory, mixed-structured tests, item parameter estimation

## Big Fish-Little Pond Effect on Mathematics Self-concept in Turkey

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In this study, the 2012 Programme for International Student Assessment (PISA) Student Questionnaire data is considered to determine the big fish-little pond effect in Turkey. The mathematics self-efficacy, self-concept and anxiety factors are examined to explain the relation of each of them with the gender, socioeconomic status, student's mathematics achievement, and school's mathematics achievement.

Different students take different combinations of items and Student Questionnaire in the PISA 2012 assessment. We only consider students who completed the mathematics self-efficacy, anxiety and self-concept scales in Turkish data set. A total number of 771 students (423 females, 348 males) from 88 high schools (36 Anatolian and 52 general high schools) are in the sample. Among these students, 333 of them are (%42) Anatolian high school and 438 (%58) of them are general high school students.

For the present study, school type, gender, socioeconomic status (SES), student mathematics achievement, school mathematics achievement and 18 items from the Student Questionnaire associated with mathematics self-efficacy, self-concept and anxiety factors were used.

In order to examine factor structure, the selected items were subjected to exploratory factor analysis (EFA) using the principal axis factoring method. Based on factor analysis results, items which loaded different factors for the different school type is excluded from analysis. Thus, four of the original 18 items were not considered for further analysis. Cronbach's alpha ( $\alpha$ ) correlation coefficient value was also calculated for each factor using reliability analysis. Prior to the insertion of the covariates, confirmatory factor analysis (CFA) were performed for general and Anatolian high schools separately to evaluate construct validity of measurement model. Then, MIMIC model applied to compare path coefficients of Anatolian and general high schools. All analyses reported in this study were carried out using LISREL 8.80 for Windows with SIMPLIS command language. Since the mathematics self-efficacy, anxiety and self-concept items are categorical WLS (Weighted Least Square) estimation method used in confirmatory factor analysis and RML (Robust Maximum Likelihood) estimation method used in MIMIC models analyses.

Factor analyses' results support the construct validity of the Student Questionnaire's mathematics self-efficacy, anxiety and self-concept items. These three factors explained 58.62% of the total variances. Total variances explained by mathematics self-concept, self-efficacy and anxiety factors are 34.86%, 14.85% and 8.91%, respectively. Four items loaded on the mathematics self-concept factor ( $\alpha=.86$ ), six items on mathematics self-efficacy factor ( $\alpha=.74$ ), and four items on mathematics anxiety factor ( $\alpha=.82$ ). Factor loadings of items take values between 0.41 and 0.76, which is satisfactory. In the second step, Confirmatory Factor Analyses (CFA) were carried out to confirm the EFA results. The data were examined separately for Anatolian high schools and general high schools. The CFA model for Anatolian high schools yielded a  $\chi^2(74)= 150.06$ ,  $p<.0001$ , RMSEA=0.056 [0.043:0.068], CFI=0.97,

NFI=0.94, GFI= 0.98 and, for general high schools  $\chi^2(74)= 132.60$ ,  $p<.0001$ , RMSEA=0.064 [0.031: 0.054], CFI=0.97, NFI=0.94, GFI= 0.98. Overall model fit seems adequate based on values selected fit indexes. These results indicated that, the three factors model that emerged in the EFA was confirmed by the CFA for both high schools types. In the third step, the structural part of the model was inserted to measurement model and the MIMIC model estimated. The influence of school type, gender, and SES on the mathematics self-efficacy, anxiety and self-concept factors was estimated simultaneously via standardized partial regression coefficients. In addition to variables in this model, mathematics achievement and school mathematics achievement variables were inserted to the second model.

After controlling the effects of other covariates, the school type variable was examined. Thus, Anatolian high school students were more likely to have higher mathematics anxiety compared to general high school students. Moreover, male students were more likely to have higher mathematics self-efficacy compared to female students. Similarly, students from higher SES were more likely to have higher mathematics self-efficacy compared to students from lower SES. Student's mathematics achievement was the most significant predictor of the mathematics self-efficacy, anxiety and self-concept factors. Students with high mathematics achievement were more likely to have higher mathematics self-efficacy and self-concept and lower mathematics anxiety compared to students with low mathematics achievement. Finally, school's mathematics achievement was a significant predictor of only mathematics self-concept. Students from schools that have higher mathematics achievement mean were more likely to have lower mathematics self-concept compared to students from schools that have lower mathematics achievement.

It is straightforward that social comparison at the high academic level schools, which have a high school's mathematics achievement mean, has an important role on the student's self-evaluation. Thus, this result provides evidence about the high successful schools' students experience big fish-small pond effect. Besides, with the increase at school's mathematics achievement mean, there is a tendency for a decrease at student's mathematics self-efficacy and an increase at the anxiety. However, these results were not statistically meaningful as it was in the mathematics self-concept. This can be explained by items that evaluate mathematics self-efficacy having specific cognitive process which causes a higher correlation with the mathematics achievement. Another possible explanation is that students attending to schools that have higher mathematics achievement can more precisely evaluate their selves according to the students attending to the schools that have lower mathematics achievement about which type of mathematics items that they can answer correctly.

In Turkey, there is a perception about attending a high school that admits students only with high test scores is the most beneficial thing for the students. In fact, rather than being a big fish in a small pond, attending a school with the students at a lower talent level but getting a good Education might protect particularly the student's mathematics self-efficacy and also their mathematics anxiety and self-concept against the negative impacts of social comparison.

**Keywords:** BFLPE, PISA, mathematics, self-efficacy, self-concept

# Characteristics of 15-Year-Old Students Predicting Scientific Literacy Skills in Turkey

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As an international study executed by OECD, in The Programme for International Student Assessment (PISA), scientific literacy is defined as “the ability to engage with science-related issues, and with the ideas of science, as a reflective citizen”. A scientifically literate person is expected to have some higher order thinking skills or competencies, like ‘explain phenomena scientifically’, ‘evaluate and design scientific enquiry’ and ‘interpret data and evidence scientifically’ (OECD, 2013, p.7). It’s well-known that there are significant correlations between scientific skills and students’ characteristics (Anil, 2009, 2011; Atwater, Wiggins & Gardner, 2006; Ceylan & Abacı, 2013; Luu & Freeman, 2010; OECD, 2009; Özer & Anil, 2011; Watters & Ginns, 2000). It’s seen that students’ characteristics are possible to be significant predictors of scientific literacy skills. At this point, PISA provides solutions and advantages with their large-scale assessment framework. In PISA studies, student questionnaire provides important information about students’ characteristics which are possible to correlate with scientific literacy and predicting scientific literacy (OECD, 2014).

Since 2003, Turkey regularly participates in PISA. According to the PISA 2012 results, 15-year-old students in Turkey performed below both OECD countries and participating countries (MEB, 2015). Defining the relations between students’ characteristics and their scientific literacy skills is thought to provide deeper understanding for the nature of this situation in Turkey.

## **Purpose**

In this context, the aim of this study is to construct a significant multivariate model with secondary level structural equating modelling which includes relations between students’ characteristics and their scientific literacy performance. Also, according to this model, it is aimed to define and interpret the predictive level of these characteristics to the scientific literacy skills of students.

## **Methods**

This study was designed as a basic research. Secondary level analyses were conducted on PISA 2012 Turkey student questionnaire data. PISA 2012 Turkey sample was composed of 4.848 students. A secondary-level structural model was constructed by using PISA data. It was utilized from IBM SPSS Statistics 20 and LISREL 8.7 software.

## **Findings**

To select variables for initial models, continuous variables in the PISA 2012 Turkey Student Questionnaire data which were defined as indexes or standard scores were selected. These variables were analysed in terms of basic assumptions. After checking basic assumptions,

principal component analysis and confirmatory factor analysis was conducted respectively. A significant model was structured with twelve variables and three factors. After these studies, secondary level modelling was tried to construct by adding ‘science literacy skills’ as a secondary level latent variable. According to the results, a significant secondary level model could be constructed.

According to the model, among three factors, ‘socio-economic status’ is the best predictor of scientific literacy skills. One-unit change in this variable leads 0.37 unit change in ‘scientific literacy skills’. ‘Opinions for teacher’ is second predictive factor and negatively correlated with ‘scientific literacy skills’. One-unit change in this variable leads -0.18 unit change in ‘scientific literacy skills’. ‘Attitudes for school’ is the third predictive factor and positively correlated with ‘scientific literacy skills’. One-unit change in this variable leads 0.10 unit change in ‘scientific literacy skills’.

Among observed variables or indicators, ‘home possessions’ is the best predictors of ‘scientific literacy skills’. One-unit change in ‘home possessions’ leads 0.33 unit change in ‘scientific literacy skills’. It is followed by ‘index of economic, social and cultural status’ and ‘wealth’. On the other hand, lowest predictors among indicators are ‘attitude towards school: learning outcomes’, ‘attitude towards school: learning activities’ and ‘sense of belonging to school’ respectively. One-unit changes in these characteristics lead 0.062, 0.076 and -0.083 unit change in ‘scientific literacy skills’.

## **Conclusions**

In this study, it’s defined that best predictor of scientific literacy skills is ‘socio-economic status’. Students’ ‘opinions for teacher’ shows negative correlation with scientific literacy skills. Students’ ‘attitudes for school’ have low but positive correlation with scientific literacy skills. Among indicators, best predictor of scientific literacy skills is ‘home possessions’. It is followed by ‘index of economic, social and cultural status’ and ‘wealth’.

In order to support the development of students effectively, it is important to understand the nature of such kind of relations. In the teaching-learning process, improvements to be made in accordance with these characteristics would likely to raise and improve students’ performances.

**Keywords:** scientific literacy, PISA 2012, Turkey, students’ characteristics

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# **A Meta-Analysis on Predictive Validity Studies of University Entrance Examination**

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To select students for universities, Measuring, Selection and Placement Center (MSPC) applies national exams in Turkey. The main purpose of MSPC is to select and place the students having higher probability of being successful for the programs. Therefore, these tests are expected to have high predictive validity. However, the results of University Entrance Examination (UEE) studies have shown that predictive validity seems to be quite different from each other. In some results of studies about UEE predictive validity were found as significant while others were not significant. Hence it is necessary to determine predictive validity of UEE via meta-analysis.

## **Purposes**

The main purpose of this study is to determine predictive validity of UEE applied between 1982-2010 years via meta-analysis. Within this framework it was aimed to answer questions mentioned below:

1. What is the distribution of variables which are publication type, direction and level of effect size?
2. What is the effect size of predictivity about academic achievement in higher education?
3. Does the effect size of predictivity about academic achievement shows difference in terms of moderator variables such as grade level, differentness of examination systems, UEE scores type accepted in program entrance, varieties of departments, existence of ability exams?

## **Method**

The main purpose is to determine predictive validity of UEE via meta-analysis so this research is a survey model of descriptive researches.

The study group of this study is 36 studies and 147 substudies, obtained from these studies, about predictive validity of UEE applied between 1982-2000 years for higher education achievement.

To collect data, the data base of university libraries, The Thesis Center of Council of Higher Education, the data base of Turkish Academic Network and Information Center, internet's search engines, proceedings of congresses and symposia were used. The collected studies were coded to Meta-Analysis Coding Form by researcher and two coders. Coder reliability was examined.

“r” was used as effect size index in study. The random effect model of Fisher z method was used for combining of effect sizes.

Grade level, differentness of examination systems, UEE scores type accepted for entrance the program, varieties of programs, existence of ability exams were defined as moderator variables.

As a sensitivity analysis, "Fail Safe Number" was calculated. To determine publication bias, average effect sizes of published and unpublished studies were calculated and compared.

### **Findings**

82% of included studies are master degree thesis. Effect size is negative for 21% and weak and small level for 67%.

Random effect model was used because total heterogeneity value of average effect size is significant. The average size of predictive validity of UEE is .193 and small level in a positive way. Moderator variables that could be heterogeneity source were analyzed.

Average effect size of grade level is .280 for studies of first level academic achievement while it is .073 for studies of other levels' academic achievement.

Average effect size of type of exam is .102 for Student Selection Examination (SSE) being first step of UEE and .157 for Student Placement Examination (SPE) being second step of UEE between 1982-1998 years. It is .188 for SSE just applied as one step to enter university between 1999-2005 years while it is .385 for SSE applied as two steps to enter university between 2006-2009 years.

Average effect size of UEE scores accepted for entrance the programs is .301 for numerical score, .140 for equal weight score and .194 for verbal score.

Average effect size of varieties of programs is .243 for studies containing single program and .066 for ones containing different programs.

Average effect size of existence of ability exams, is .203 for programs not required ability exams while it is .096 for programs required one.

Average effect size of state of publication is .246 for published studies and .173 for unpublished studies. Not being significant difference between published and unpublished studies is determined.

The findings are appeared to be invalid if there is opposite value to present findings at least 15191 studies in literature for fail safe number analysis of 98 substudies included meta-analyses to calculate average effect size.

### **Results**

It was determined that most of the effect size values of the studies taken to analyses are in weak and small level. Besides existence of the studies having negative effect size shows that students having higher UEE achievement has lower academic achievement.

Being positive and in small level (.193) of average effect size of predictive validity in UEE shows that predictive validity of UEE is in small level. Calculated fail safe number shows that result of the analyses is quite powerful. Not being biasness is determined according to the studies' publication status.

Effect size of the study about first year students is bigger than ones in other class levels, therefore these results support the finding which is predictive validity studies mentioned in the literature should be conducted on first year of the university.

It was determined that SSE used in one session within two stages examination systems has the highest predictive validity.

It was seen that numerical score of the UEE is a better predictor than other ones.

It was expected that range restriction is even partially solved by studying on different programs to make the group heterogeneous. However, analyze results showed that effect size of the studies about one program is higher than ones about different programs.

It was determined that predictive validity of the UEE score is lower for the programs required ability exam; besides less number of predictive validity studies about ones.

### **Suggestions**

In case of changing the UEE systems it was suggested that authorized person should consider that effect size of the UEE is in low level and changing according to the scoring type.

It was also suggested mentioned below that

- Predictive validity studies should be conducted within distinguishing them according to scoring types of different programs.
- The number of predictive validity studies in programs accepting students with ability exam should be increased.
- Reasons of finding negative correlation in UEE predictive validity studies should be investigated.

The study's title should reflect the content.

**Keywords:** Meta-Analysis, Predictive Validity, University Entrance Examination

# **An Investigation of the Programme for International Student Assessment 2012 in Terms of Formative Assessment Usage “Turkey Example”**

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The beginning of No Child Left Behind (NCLB) movement more than ten years ago, proficiency understanding has gained importance increasingly. Moreover, formative assessment has gained importance on teaching and assessment policies in many countries. The Council of Chief State School Officers (CCSSO) has recently embarked on a major strategic initiative to explore formative assessment with the goal of familiarizing educators with its characteristics, and also helping educators to understand the necessary components to make formative assessment genuinely effective. October 2006 CCSSO meeting in Austin, Texas, a collaborative of more than 20 states arrived at the following definition of formative assessment: “Formative assessment is a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students’ achievement of intended instructional outcomes”. This definition notes that formative assessment is a process, and not merely a particular kind of test. This process can be formal or informal-that is, the process may involve the use of formal tests, or it might rely on informal observations like teacher-student interviews (Popham, 2007). Brookhart (2009) is also emphasize that formative assessment refers to the ongoing process both students and teachers engage in when they focus on learning goals, take stock of current student work in relation to the learning goals using formal or informal assessment processes and take action to move students closer to the learning goals (i.e., teachers adjust teaching methods or students adjust learning methods). As we understand from these definitions, the feedbacks given in formative assessment process contribute to the use of measuring results as teaching and learning tool. The formative assessment concept has also taken place in The Program for International Student Assessment (PISA) which is organized by Organization for Economic Co-operation and Development (OECD) in last implementation. PISA is a triennial international survey which aims to assess 15-year-old students’ skills in math, reading and science literacy internationally, and also evaluate education systems worldwide by testing. The assessment is forward-looking: rather than focusing on the extent to which these students have mastered a specific school curriculum, it looks at their ability to use their knowledge and skills to meet real-life challenges. This orientation reflects a change in curricular goals and objectives, which are increasingly concerned with what students can do with what they learn at school (OECD, 2014). PISA 2012 survey focuses on mathematical literacy. Because of this focus, a large number of new mathematical literacy items have been created and trailed for 2012, the Framework which specifies the nature of the assessment has been revised. The

questionnaires for students and schools will emphasize mathematics. Mathematics has a hierarchical structure, so that the feedback is more important to new learnings. Therefore, the usage of formative assessment in mathematics lessons contributes to the development of mathematical thinking skills.

In today's world, it is necessary to provide students with an education that will help them become individuals with advanced thinking skills who can transfer their knowledge in to real life situations and can efficiently use the same to sort out the problems they confront (Arıcı and Altıntaş, 2014). Although given quite a large place in the international literature on this issue, is thought not to be addressed adequately in practices in Turkey. Even classroom measurement and evaluation practices are also more result oriented. In this sense, a research on the formative assessment and the variables thought to be related to formative assessment will contribute to both the practice in Turkey and the literature.

### **Purpose:**

In this context, the aim of this study is to determine whether student oriented teaching, experience oriented teaching, teacher support and the class size predict the usage of formative assessment in mathematics. In this purpose, the importance level of the predictors is determined in PISA 2012 in Turkey.

### **Method:**

This study is designed as a predictive research that falls in the correlational survey model, one of the general survey models. The sample of the study consists of PISA 2012 Turkey sample (4848 students). Before analysis, the missing data were excluded from the dataset and the assumptions were tested. After these analyses, the sample consists of 1388 Turkish students. The data were obtained from the student and school questionnaires used within the scope of PISA 2012. Ordinal logistic regression analysis was used. Logistic regression models, also called logit models, apply with binary responses and assume a binomial distribution (Agresti, 2002). But ordinal logistic regression analysis is used to predict an ordinal dependent variable given one or more independent variables. (Hosmer, Lemeshow and Sturdivant, 2013) The variables of the study consist of two group (predicted and predictor) variables. The predicted variable is formative assessment usage and the predictor variables are respectively, student oriented teaching, experience oriented teaching, teacher support and the class size. The predicted variable, teacher behavior when conducting formative assessment (TCHBEHFA), was measured by four items in the Main Survey of PISA 2012. Response categories were "Every lesson", "Most lessons", "Some lessons", "Never or hardly ever". The first predictor variable, teacher behavior when performing student orientation (TCHBEHSO), was also measured by four items in the questionnaire. Response categories were ranged from "Every lesson" to "Never or hardly ever". Six items measuring students' exposure to applied mathematics tasks at school (EXAPPLM) were used in PISA 2012. Response categories were "Frequently", "Sometimes", "Rarely" and "Never". Five items measuring teacher support (TEACHSUP) in mathematics classes were used in the questionnaire. Response categories were ranged from "Every lesson" to "Never or hardly ever". The class size variable was measured by an open-ended question. In accordance with the open-ended responses from students, this variable is transformed into a categorical variable that consists of three levels by using the literature (Chingos, 2013, Kornfeld, 2010, Ehrenberg, Brewer, Gamoran, and Willms, 2001, Krueger and Whitmore, 2001).

**Findings and Results:**

The study showed that The model which consists of these variables (student oriented teaching, teacher support, experience oriented teaching and the class size) is significant and the rate of the classification accuracy is 58%. Furthermore, all predictors have positive coefficients.

**Keywords:** program for international student assessment (PISA), mathematical literacy, formative assessment, and ordinal logistic regression analysis

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# Determining the Effectiveness Of Science Process Skills Program Prepared for Elementary School Grade 4

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Instructional strategies and curriculum sequences aimed at teaching process skills have received considerable attention in science education. On the other hand, the teaching of domain-independent, context-free skills has been subject to criticism on the ground that important aspects of cognitive activities are functions of meaningful contexts. The aim of this research is to develop a “Science Process Skills Program” (SPSP) for elementary school grade 4 and determine the effectiveness of this program in terms of acquiring science process skills.

## Methods.

To that end, SPSP was primarily developed. During the development stage of the program, sub-dimensions of science process skills were identified using an eclectic approach and the gains related to the sub-dimensions were noted. The gains of the unit “Let’s Learn The Matter” in Science and Technology Course Program and the gains of the SPSP were correlated and lesson plans were prepared. The relevancy and the scientific accuracy of the SPSP were evaluated by 11 experts at different stages.

The workgroup of the research consists of 48 students studying at Aydınlikevler Elementary School classes 4/C (N=24) and 4/D (N=24) in the district of Altındağ in Ankara. Science Process Skill Test (SPST) developed by the researcher and short answer questions were used in the research. SPST has 39 multiple-choice questions and its validity and reliability analysis was carried out based on preliminary test. Based on expert opinions and the results attained from the difference between the groups, it was determined that it could yield viable results. The KR-20 reliability and the average difficulty of the test were calculated 0,82 and 0,48 respectively. Short answer questions were used to evaluate the learning process. The relevancy of the program to the students’ level and the feature to be measured was determined based on expert opinions. Scoring rubrics were used in scoring the short answer questions.

SPSP was administered to experimental group within a period of 9 weeks. During this period, the control group received no treatment. Short answer questions were asked to the students in the experimental group at the end of each activity, and to the students in the control group within the same week and their answers were documented in writing. After scoring the answers of the students, in order to ensure the reliability of the scoring, other than the researcher, two other science teachers scored the answers and high reliability (Kendall’s  $W=0,88$ ) between the scorers was observed.

## Results.

The findings obtained at the end of the research show that SPSP increases the level of use of science process skills of the students in the experimental group significantly, compared to the

students in the control group. When the answers to the short answer questions of the students both in experimental and control groups were examined, it was noted that the students in the experimental group had higher percentages of right answers compared to the control group for all questions. Furthermore, findings have also showed that the program is effective in acquiring the gains of science process skills.

### **Discussion and Conclusions:**

*In the light of these results, the following conclusions can be made.* It has been thought that there is a need for supplemental programmes in order to be able to make changes and improvements of new curriculums come true successfully when Turkish students' failure of both national and international exams is taken into consideration. It has also been thought that students can use metacognitive processes more effectively with the help of programmes dealing with basic life skills; so that they will be able to acquire life long learning skill without restricting learning content to the school.

### **Suggestions**

- A Science Process Skills Program which was prepared independent from contents of lessons can be applied in schools as from kindergarten. As a result, students' science process skills can be affected positively.
- In schools some activities, which affect science process skills positively, can be systematically placed in lessons such as social studies, Turkish, music and art in addition to science and mathematics.
- Activities applied in schools can be prepared towards real life situations and usage of science process skills. Hence, it can be easier to apply these activities in daily lives of students.
- An application which doesn't depend on content can be performed by developing Science Process Skills Program independent from contexts of subjects, and students' improvements of science process skills can be inspected. Besides, by applying to different age groups, how much these groups benefit from the program and differences of their skill levels can be examined.
- By performing Science Process Skills Program both independent from and dependent on content, applications can be determined on which students improve their science process skills more.

**Keywords:** Science process skill, program evaluation.

# Adaptation of the Kaufman Domains of Creativity Scale into Turkish and examination of its psychometric properties<sup>10</sup>

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The general objective of this study is to adapt the Kaufman Domains of Creativity Scale (KDCS) which was developed by Kaufman (2012) into Turkish and the group of talented students using the point of view of creativity specific to the domain.

## Method

In the adaptation study, three different activities were conducted. In the study I, the structural validity of the KDCS was analyzed through Explanatory Factor Analysis (EFA). In the study II; the EFA was applied to the data set for the first thing then the Confirmative Factor Analysis (CFA) was applied in order to test the emerging structure. In order to test the validity of criterion-referenced validity of KDCS in the study III, the Scientific Creativity Test (SCT) developed by Şahin, Atmaca and Bahtiyar (2015) was used. The data obtained from 241 students of one school in the first study, that of 254 students from two different schools in the second study and 241 students from two different schools were included to the analysis.

## Findings

*Study I:* As a result of EFA, the data was found convenient for factor analysis (KMO value, .864; Barlett Sphericity,  $\chi^2= 5298.891$ ,  $p< .01$ ). As a result of the repeated analysis, 43 of the items in the original scale which contains fifty items and five sub-factors were determined to function and all the other items except one item were determined under the sub-factors in the original scale. The Cronbach  $\alpha$  internal coefficient of consistence ranges between .87 and .78. The general of the scale is .92.

*Study II:* As a result of EFA, the data was found convenient for factor analysis (KMO value, .828; Barlett Sphericity,  $\chi^2= 5825.317$ ,  $p< .01$ ). As a result of the repeated EFA, a structure consisting 42 items and five factors was emerged. All the other items except the twenty eighth item were found under the sub-factors in the original scale. In order to test the structures emerging with EFA, CFA was applied to the data set. The result of EFA was determined to overlap CFA. When the path coefficients ( $R^2$ ) of the items are analyzed, the twenty-eighth model provided less contribution than 1%. Then, this item was excluded and the analysis was repeated. Thereupon, this item was excluded and the analysis was repeated. As a result of this, a structure which has five sub-factors consisting of 41 items and which conforms to the locations of the items in the original scale was established. While examining the Good fit index, the criteria suggested by Kline (2011) was considered. The aforementioned indexes were determined as  $\chi^2_{765}= 1480.75$  ( $p< .01$ ),  $\chi^2/Sd= 1.936$ ,  $RMSEA=.06$ ,  $SRMR= .074$ ,  $GFI=.78$  and  $CFI=.93$ , respectively. The correlations between five sub-factors and the scale was positively and significantly determined to vary between .13 and .98. The reliability values of the scale were analyzed through internal consistency coefficient. The Cronbach  $\alpha$  coefficient of the sub-factors ranges between .87 and .77. The general value of the scale is .90. The distinguishing validity of the items of the scale was analyzed through the item analysis

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method which is based on the difference between the averages of sub-layer and parent-layer. As a result of this, a significant difference was determined between the scores of sub-layer and parent-layer ( $t_{(69)} = -62.277, -129.235, -74.747, -150.421, \text{ and } -145.253, p < .01$ ).

*Study III:* In order to determine the relationships between KDCS-T and SCT, Pearson Correlation Analysis was applied. A slight, significant and positive relation was determined between scholarly and art performance and fluency total ( $r = .18, \text{ and } .19, p < .05$ ), total flexibility ( $r = .17, \text{ and } .20, p < .05$ ) and total creativity composite scores ( $r = .16, \text{ and } .20, p < .05$ ). A similar relationship was determined between the sub-dimensions and total flexibility ( $r = .19, \text{ and } .19, p < .05$ ) and the creativity composite scores ( $r = .15, \text{ and } .15, p < .05$ ) of the mechanical / science creativity and self/ everyday creativity. Besides, a slight, significant and positive relationship was determined between artistic creativity and fluency total scores ( $r = .15, p < .05$ ).

### **Conclusion**

The validity and reliability analysis of KDCS-T show that it is a valid and reliable measurement instrument. The scale which has been adapted to Turkish culture may be one of the instruments convenient to determine the creativity of the individuals in five different domains within the context of its sub-factors and the total of those sub-fields. Ultimately, the structure with five factors such as scholarly creativity, mechanical / science creativity, art performance creativity and Self/ everyday creativity and artistic creativity was confirmed. This instrument may be used by the researchers in order to determine the creativity levels of the students in the educational institutions and organize the activities related to this.

**Keywords:** *Adaptation, talented students, creativity scale.*

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# Comparison of Different Estimation Techniques for Categorical and Ordered Data in Confirmatory Factor Analysis

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In confirmatory factor analysis (CFA), which is used quite often for scale development and adaptation, should be chosen the correct estimation technique, affects the results obtained from the study. Because used estimation technique, the model parameters and their standard errors, and the model data fit values has the effect on the results. Most used CFA technique is maximum likelihood, which is used for continuous variables and observed variables are multivariate normal distribution assumed that. However, in the social sciences and psychology, many of the used variables aren't continuous level, which is categorical and ordered level (Yang-Wallentin, et al., 2010). Some of estimation techniques produced for ordered level data, weighted least squares (WLS), unweighted least squares (ULS) and diagonally weighted least squares (DWLS). In these three techniques, asymptotic covariance matrix is used, estimated from categorical variables and obtained from polychoric correlation matrix (Katsikatsou, Moustaki, Yang-Wallentin, Jöreskog, 2012).

The overall purpose of this research, to compare the performance of different estimation techniques which are used for CFA. For this purpose, the following problems are researched:

At the level of ordered, first (set-1) and second (set-2); at the categorical level (set-3) data set;

1. How is regression coefficients and their standart errors, obtained from ML, ULS and DWLS estimation techniques?
2. How is t values, obtained from ML, ULS and DWLS estimation techniques?
3. How is model fit indices, obtained from ML, ULS and DWLS estimation techniques?
4. How is iteration number for converging, obtained from ML, ULS and DWLS estimation techniques?

## Method

This study, which is compared different estimation techniques, is a basic research.

Ordered data used for this study is obtained from Epistemological Belief scale. This measurement tool implemented to university students at 2007-2008 academic year, seven regions of seven different universities in Turkey, the first and fourth grade. To compare the sample size obtained from different ordered level findings, from 548 students, two different data set chosen, 250 (set-1) and 500 (set-2). Categorical data used for this study is obtained from Beck Hopelessness Scale. Data obtained from 200 children (set-3) for Dinler-Içöz's (2014) master thesis was also used in this study by permission. Univariate and multivariate normality tests are used for all data sets. All items cannot show univariate and multivariate normality.

Weighted least squares technique, due to in the asymptotic covariance matrix non-positive elements to take place and for parameter estimation is necessary high sample size ( $\geq 1000$ ) is not reached, taken off from this study (Hoogland and Boomsma, 1998).

### **Findings**

According to findings for set-1, regression coefficients calculated by different estimation techniques, according to ULS and DLWS more stable results then ML has been given (ML: 0.40-74.38; ULS and DWLS: 0.02-0.86). Average of standard error for ML 0.677; for ULS 0.090 and for DWLS 0.096. For set-1, parameter estimated with minimum error by ULS technique. This finding shows similarity with Forero et al. (2009) study.

According to findings for set-2, regression coefficients calculated by different estimation techniques, according to ULS and DLWS more stable results then ML has been given (ML: 0.43-142.29; ULS and DWLS: 0.02-0.86). Average of standard error for ML 0.806; for ULS 0.089 and for DWLS 0.096. For set-2, parameter estimated with minimum error by DWLS technique. This finding shows similarity with Mîndrilă (2009) study.

According to findings for set-3, regression coefficients calculated by for ML: 0.15-0.92; ULS: 0.28–0.92 and DWLS: 0.31-0.94. Average of standard error for ML 0.094; for ULS 0.086 and for DWLS 0.085. For set-3, parameter estimated with minimum error by DWLS technique. All parameter estimate techniques shows similar regression coefficient results, but when standard errors analyzed, ULS and DLWS techniques show more stable results then ML.

For set-1 and set-2, with ML estimation technique, parameters with higher t values obtained. Estimated standard error values are lower than ULS and DWLS, although ML estimates higher t value. For set-3, with ULS and DWLS techniques, higher t values were obtained

For set-1 and set-2, goodness of fit indices with ULS and DWLS techniques were similar. With ML estimations with the increase of sample size, some improvements were made, such as, RMSE index, CFI and GFI, but this improvement does not show the expected level. For set-3, ULS and DWLS techniques has given better results.

ML, DWLS and ULS estimation techniques converging results were examined, ULS technique can estimate the parameters by minimum number of iterations.

### **Conclusions**

Categorical level datasets, ULS and DWLS techniques can estimate the parameters with less standard errors then ML technique; parameter estimation with least error done by DWLS. As a result, ULS technique can converge with minimum number iterations and related parameters with sample data to estimate the parameters belonging to it has been determined that the most appropriate technique.

**Keywords:** confirmatory factor analysis, unweighted least squares, diagonally weighted least squares

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# **A Multilevel Modelling Approach to Determine the Factors Influencing the Usefulness of Portfolio Assessment**

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Performance assessments in classrooms are used to enhance students' skills in problem-solving, acquiring transferable knowledge, critical thinking, self-regulated learning and establishing knowledge construction for meaningful or deep learning (Struyven, Dochy, Janssens, Schelfhout, &Gielen, 2006). Although perceptions and judgments about pedagogical formation courses may vary, they are often thought as useful tools preservice teacher training. It has long been realized that alternative ways of thinking about learning, assessing learning, measurement and evaluation were needed (Scott-Little, Paro, &Weisner, 2006; Chung, 2008). One of these methods for evaluating students' performances are the portfolios and its evaluation. Kemp and Toperoff (1998) defined portfolio as "purposefully collecting students' works showing the student's efforts, growths and success in one or more fields" (cited in Kan, 2007).

## **Purpose**

The current study focuses on evaluating the enhancements that a performance based evaluation strategy could make in the proficiency levels of preservice teachers who attend a measurement and evaluation course. In this study, we investigate the degree to which a performance based assessment strategy may enhance preservice teachers' (1) attitudes towards a measurement and evaluation course, and (2) competency in understanding and applying related concepts and techniques to solve assessment problems. The ultimate purpose of this study is to determine the factors that may affect student outcomes in alternative modes assessment in order to collect evidence that may help professors who teach or would like to teach measurement and evaluation courses to better design and coordinate their course preparations.

## **Method**

A total of 189 preservice teachers from four different classrooms each taking a measurement and evaluation course participated in the study. Student performances in two of these classes are assessed through portfolio assessment while the other two are assessed through more conventional methods. Throughout the semester, student performances in four classrooms will be assessed using multiple instruments, including a multiple choice test to assess more conventional kinds of skills, a questionnaire to track motivation levels, and a set interviews to better understand opinions, perceptions and judgments about the course work. The data will

be analyzed using multilevel models and considering group differences. The method of the study is a static-group comparison design, at the same time it is known as nonequaled group design with posttest. Subjects are not selected randomly to nonequaled groups (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2014).

The study provides an application which collects data from four distinct classrooms taking the same measurement and evaluation course thought by the same instructor in a similar way. The collected data will be analyzed using a multi-level modeling approach which allows both group and person level statistics to be estimated together with test and item statistics.

### **Findings**

In our on-going process of observing the classrooms and evaluating the data, we see that there might be several factors that may influence the success of using an alternative mode of assessment in teaching a measurement and evaluation course to preservice teachers. Some of these factors appear to be surprisingly unrelated to the actual content of the course work, such as, the size of the classroom and the availability of self-learning tools, while some others indirectly hint at the importance of the awareness of the students about pedagogic formation courses in general.

### **Conclusions**

The current study underlines the importance of designing, implementing and evaluating need for applying new modes of assessment for a particular course, a measurement and evaluation course, that preservice teachers take as a part of their training program.

As instructors who teach one these courses know very well, the task of determining the optimal way of teaching and assessing these courses can be very challenging for not only (depending on the particular field of study of the students) students' overall ability levels vary, but also, their attitudes towards the subject matter may shifts drastically.

### **Suggestions**

The findings of the current study are important, because they may help unveil some of the factors that can help instructors to make a better plan, teach and assess such pedagogic formation courses. The results of this study should shed some light on the degree of influence of some of the hypothesized factors suspected have on the success of using new modes of teaching and assessment, such as, students' motivation level, availability of self-learning tools in their immediate environment, and their particular training context as determined by their particular field of study.

**Keywords:** Portfolio Assessment, Multilevel Modelling, Teacher Training.

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# Home, Classroom Characteristics and Young Children's Self-Regulation and Language in Turkey and USA

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Pre-kindergarten and kindergarten age children's self-regulation regulation (e.g, emotion, behavior, and executive functioning) and language development matter for school and social success (Denham et al., 2003; Gumora & Arsenio, 2002). Self-regulation regulation is a broad concept, encompassing impulse control and executive functioning (Smith-Donald et al., 2007) and it predicts children's concurrent and future academic and social skills (Molfese et al., 2010; Von Suchodoletz & Gunzenhauser, 2013). . Language development is highly predictive of reading and later language abilities as well as social skills (Bono & Bizri, 2014; Kuhl et al., 2005). Low-income children are vulnerable to deficits in both areas and early childhood programs seek to provide experiences that will supplement school readiness skills. Programs recognize that both classroom quality and relationships and parent-child relationships—as well as other factors such as nutrition, health and media use—affect children's development. In both the US and Turkey, there is interest in understanding the pathways to children's progress in these important domains of Self-regulation and Language development in the context of intervention programs. While the challenge is similar between the US and Turkey, the pathways of inputs and outcomes may be different due to interesting and important cultural variations.

This paper/poster will delineate the purposes of the study: (1) What are characteristics of children's SR in Turkey and USA? How do measures converge and differ? (2) How do parenting factors affect children's outcomes and growth in language and SR? (3) How do classroom factors affect children's outcomes and growth in language and SR? (4) How do feeding practices and nutrition affect children's outcomes in BMI, and SR? (5) How do media factors affect children's outcomes and growth in language and SR?

## Method

(Design) Hacettepe University and the University of Nebraska are conducting cross sectional parallel studies focused on low-income children in pre-kindergarten and kindergarten programs in Ankara and Nebraska (Lincoln and Omaha).

(Participants) Currently, approximately 300 children and families in 17 classrooms in Nebraska and approximately 500 children and families in 50 classrooms in Ankara have been recruited or assessed.

(Data Collection Tools) These studies offer assessment of children's language, SR, parent factors (e.g., parent-child relationship, depression, parenting stress, demographics), classroom factors (e.g., teacher-child relationship), nutrition (e.g., feeding practices, BMI, breastfeeding) and media use (e.g., TV and digital media time). Measures are those previously validated in both English and Turkish, with a few exceptions. Main measures include:

*Language Skills:* The Peabody Picture Vocabulary Test- fourth edition (PPVT-IV; Dunn & Dunn, 2007) was used to assess children's receptive language vocabulary skills.

*Self-regulation:* The Preschool Self-Regulation Assessment (PSRA; Smith-Donald et al., 2007) was used to assess preschool children's self-regulation in emotional, attentional, and behavioral domains. Tasks include toy wrap, snack delay, balance beam, tower task, pencil tap, disappointing gift.

*Family Demographics:* Parents completed a survey includes age and gender of the caregiver, SES, and employment status etc.

*Parent-Child Relationship:* Parents completed Child-Parent Relationship Scale (Pianta, 1992). This scale consists of closeness and conflict subscales.

*Student-teacher Relationship:* The current study used the Student-Teacher Relationship Scale (STRS; Pianta, 2001) to measure teachers' perceptions about their relationship with students via teachers' report.

## **Findings**

Early findings using regression techniques demonstrate linkages between children's nutritional status and SR; media and SR, and parent-child and teacher-child relationships and SR. We will present these in preliminary form.

*Conclusions/Suggestions:* Importantly, the paper will offer a lens on factors and dimensions related to posing similar cross cultural questions and methods. The paper/poster will delineate the procedures needed to carry out this research, including joint development of research questions, in person and Skype meetings between Turkish and US team leaders, development of consistent procedures (e.g., in certification of data collectors), and plans for joint analyses of data.

We will present a discussion of measures and the process used to select the measures. In the USA study, findings from measures are also used to inform teachers about children's development in continuous improvement loops, and we will illustrate and make suggestions about how that is accomplished. We will discuss the rich experience of working in a cross cultural context.

**Areas:** Early Childhood Education; New Approaches in Measurement and Assessment

**Keywords:** Emotion Regulation; Early Childhood Education; Cross Cultural

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# **The Role of Teacher Morale on Students' Math and Science Achievement: Findings from Singapore, Japan, Finland and Turkey**

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Wayne and Youngs (2003) supported that the teachers are the main source of the education system and the researchers and politicians who are looking for the ways of enhancing education system should focus on teachers. In the literature, there are many studies that examine the relationship between teacher characteristics and students' academic achievement (Ellenberg, 1972; Miller, 1981; Nye, Konstantopoulos, ve Hedges 2004; Rivkin, Hanushek, ve Kain 2005; Aztekin & Yilmaz, 2014). These studies generally indicate a positive relationship between teachers' morale and students' achievement and emphasized the positive effect of teacher morale on students' attitudes and learning.

According to the results from the PISA 2012 cycle (Programme for International Student Assessment) "teacher morale" is one of the statistically significant factors (except Finland and Poland) that effects students' math achievement in best performer countries (Aztekin & Yilmaz, 2014).

PISA is one of the well-known international surveys that "assesses the extent to which students near the end of compulsory education have acquired key knowledge and skills that are essential for full participation in modern societies"(OECD, 2013). It is conducted every three years and PISA 2012 was the last cycle of the program with a primary focus on mathematics with reading, science and problem solving as minor areas. Moreover, some information about teacher characteristics is gathered by student and school questionnaires in this survey. The aim of this study is to evaluate the results of PISA 2012 mathematical and science literacy in terms of teacher morale variable for four countries. The researchers compared the results of Turkey with the results of successful performers in PISA 2012; Singapore, Japan, Finland. This study is part of a wider study that examines the teacher characteristics of some countries in terms of the results of PISA 2012 and TIMSS 2011 (The Trends in International Mathematics and Science Study). The research questions that guide the analysis are:

- What are the differences in teacher morale between four countries according to PISA 2012 results?
- How does teacher morale interact with students' math and science achievements between countries?

In this study, PISA 2012 database, obtained from the website of OECD, was used for the analysis. The participants of the study are school principals and their students who were 15 years old at the time of assessment (OECD, 2012). The researchers focused on the "the index of teacher morale (TCMORALE)" which was derived from school principals' responses to the four items. The items are "i) the morale of teachers in this school is high; ii) teachers work

with enthusiasm; iii) teachers take pride in this school; and iv) teachers value academic achievement". A four-point scale was used with the response categories as "Strongly agree (=4)", "Agree (=3)", "Disagree (=2)", "Strongly disagree (=1)". To investigate the role of teacher morale on students' math and science achievements, the researchers conducted a descriptive and a multilevel regression analysis. They gathered information from the publications in which results of PISA are discussed and used SPSS and HLM software for the necessary analyses.

At the end of the descriptive analysis, it was found that generally Turkey has the lowest scores. In Turkey; 88 % of principals agree or strongly agree that the morale of teachers in their schools is high, 89 % of principals agree or strongly agree that teachers work with enthusiasm, 87 % of principals agree or strongly agree that teachers take pride in this school. For these items other countries have higher scores. But the result of last item differs from the previous items. In Japan, 76 % of principals agree or strongly agree that teachers value academic achievement. This ratio is 98 % in Turkey. The results showed that the index of teacher morale has different effects on students' math and science achievement. Students' achievements were mostly effected in Turkey by teacher morale. A one unit increase in the index of teacher morale is associated with an increase in achievement of about 1 point on math literacy scores. This increase for Finland is about 1 point, it is about 5 points for Japan and Singapore and it is about 8 points for Turkey.

**Keywords:** PISA, Science Literacy, Math Literacy, Teacher Morale

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# **Applicability Of Literacy Acquisition Predictors In English With Eight- To Ten-Year-Old Arabicspeaking Children**

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There has been a growing consensus that six language-related skills are powerful predictors of early literacy acquisition. These are letter knowledge (Muter et al., 2004), phonological awareness (Carroll et al., 2003), rapid automatized naming (Savage et al, 2008; Landerl & Wimmer, 2008), verbal memory (Snowling et al., 2003), receptive vocabulary, and grammatical and morphological knowledge (Gillon, 2004). Most of the studies considering these factors have been conducted in English. However, the contribution of these skills to reading acquisition has recently been investigated, although on a much narrower scale, in other alphabetic orthographies. While studies of English speaking children have highlighted the importance of phonological awareness (PA) and the ability to decode letters into sounds as a predictor of variability in literacy acquisition, evidence has been presented that rapid automatized naming (RAN) was the strongest predictor of variance in reading ability amongst German speaking children (Wimmer, 1993). The transparency of the script has been found to be an important factor in interpreting such variations (Elbeheri and Everatt, 2006). A transparent orthography, such as German, has a simple one-to-one relationship between letters and sounds, whereas a nontransparent or deep orthography, such as English, has a much more complex relationship. Therefore, it has been argued that the contribution of the variables to reading in other languages varies depending on the characteristics of the orthography being learned and the linguistic context (Smythe et al, 2008). The vast majority of studies examining the relationship between reading acquisition and predictive skills have been on children learning to read in Latin alphabets (Asaad and Eviatar, 2013). Studies investigating the relations between these literacy skills and the development of Arabic orthography have hitherto been few. The present study investigates the contribution of these variables in reading Arabic, bearing in mind the special nature of the Arabic writing system. It also aims to shed light on and to present a brief description of the current education system in Egypt. The local context of the children participating in this particular study as well as a brief clarification about the literacy related skills will be outlined as well in an attempt to set a proper background that may contribute to providing some interpretations when variations of outcome seem to appear within the same group of participants.

## **Purpose**

The dominance of English as the language in which assessments, research, intervention programs and high-caliber teacher training are conducted reflects the importance of testing the applicability of English-based indicators of literacy acquisition to the Arabic context.

## **Participants**

The age of the children participating in this study ranged between eight- to ten-years-old. Participants were 40 (20 female) Arabic speaking primary school children from the 3rd and 4th grades of a mainstream language and an International school in Cairo. Ethical approval for the study was obtained through the Department of Psychology and Human Development at UCL, Institute of Education. Participation in the study was voluntary and based on parental/guardian consent

### **Data Collection Tools**

All children were tested on reading-related skills assessments tapping phonological processing ability, letter knowledge and vocabulary knowledge

### **Data Analysis Techniques**

The data were analyzed using (SPSS) version 20. The research questions were answered using descriptive (mean and standard deviation) and inferential statistics. Analysis were carried out at the grade level (3 and 4) than at the school type level (mainstream and international).

### **Findings**

The first question in the study was whether such literacy skills do associate with reading in Arabic. Provided that the answer to the this question was positive Positive correlations were found between the reading ability measure (word recognition), and (PA) from one side, and again between (word recognition) and letter knowledge among participants in grade 3 but not in grade 4. A finding that comes in line with the findings reported from previously visited studies. Moreover, these results were not reflected on the scores from children in grade 4. This, as well, is another given finding indicated in the literature. A surprising finding was that the same pattern of relations, and among the same variables namely : word recognition, PA and letter knowledge, was found in the scores of the international school. The analysis of the mainstream school reveals the absence of such relations.

### **Suggestions**

New Approaches in Measurement and Assessment are clearly needed, based on the nature of the orthography studied as well as the culture of the students targeted.

**Keywords:** Transparent/ deep orthography- literacy predictors- Assessments- phonological awareness- rapid automatized naming.

## **Experts Prediction Powers of Differential Item Functioning Levels of Math and Turkish Tests Items**

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One of the most important psychometric properties of the achievement tests are used in the education field are validation. To determine the validity of tests there are so many techniques. In recent years, the most is recommended item bias research. Generally, item bias research leaned statistically on differential item functioning (DIF) and also leaned on experts examine of items. Differential item functioning for achievement tests can be define as changing or differentiating of probability of correct answer of same ability level. Fundamental problem of determining DIF originates from dispute between person's ability level and item difficulty (Kelderman & Macready, 1990). The students the possibility to give the correct answer to a question is to be expected to change if ability levels are different. However, theoretically and logically probability of correct answer to a question of individuals in the same ability level is expected to equal and if this probability level differs on a critical manner one reason of this could be item bias. As a result, biased items will change the total scores and validity of results will be effected (Zwick, Donoghue & Grima, 1993). Therefore, DIF and bias analysis of item and tests is an important part of the test development.

In contrast to the traditional approach this research based on determining biased item by the reverse steps in the process and different ways of thinking can lead to useful monitoring the results. Researchers believe to before applying the test, asking experts to predict the DIF level of the items are possible improve their predictive power and experts prediction score means can possible determine the items with a high DIF level.

This study designed as a correlational research, it is search the consistency between field experts DIF predictions and statistical DIF results of the tests. Population of the research is 777.291 students who attend and answered Turkish and math questions on student selection and placement exam for secondary education (OKS) 2005. Two field experts group constituted for DIF prediction. Each group has 10 experts and experts are math and Turkish class teachers or volunteer academicians, who has a PhD degree on measurement and evaluation on education program. Data of the study has obtained by two steps. Firstly the results of 777.291 students Turkish and math OKS test results. Each tests contains 25 items. Secondly, the data has been procured by field experts. On the beginning field experts has informed about DIF and ways of determine DIF. After then, weak, medium and high DIF level question examples has shown. When experts were ready, Turkish and math tests questions were given to them according to their field and asked them to write down DIF

levels they were predict. Measurement and evaluation experts took both tests. Analyses of the data has finished by three steps. On the first step experts predictions whether the DIF level is weak or none, medium or high and if there is DIF experts asked to write down which gender has an advantage or does it uniform or non-uniform. Experts means has taken to predict DIF and used as a predicted DIF level. If experts means between 1-1.67 it has been taken as weak level of DIF, 1.68-2.34 medium level of DIF and 2.35 and higher high level of DIF. According to experts predicts items with medium and high level of DIF also grouped by uniform or non-uniform DIF and male or female advantaged DIF. On the second step of the data analyses 777.291 students OKS 2005 results has transformed to 1-0 binary format. And DIF analyses have performed by logistic regression and Item response theory likelihood ratio test and determined the level of DIF for each item. On the last part of the data analyses experts' predictions and statistical analyses results have compared.

According to the results of the analyses both Turkish and math experts have identified most of the items weak DIF levels. Math experts have better prediction than Turkish experts. Experts predictions compared with statistical analyses results and math experts predictions were more exact than Turkish experts. This result is consistent with the literature (Gelin&Zumbo, 2003). Both experts prediction power on uniform and non-uniform DIF were low. Both experts groups were more compatible with logistic regression results than item response theory DIF methods. According to these results DIF method are similar in many studies in terms of superiority to others ( Atalay, Gök, Kelecioğlu& Arslan, 2012).

As a conclusion, it can be said that the education given in DIF and bias issues to the partially work well. It is though that this type of studies will have developer effect for prerequisite to be carried out after the statistical analysis and especially by including item writers actively to this process can be written better items. As a result asking to the experts to examine test items and predict DIF level were obtained tips about how to behave more carefully while writing and analyzing items.

**Keywords:** item bias, differential item functioning (dif), judge prediction, dif prediction

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# Determination of Differential Item Functioning in Research Self-Efficacy Scale

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Bandura (1994) defined perceived self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Self-efficacy is one of the fundamental concepts studied under the social learning theory. According to this theory, one of the major psychological influences affecting individual behavior is self-efficacy beliefs (Bandura, 2005). Research skills obtained from pre-school to higher education can be expressed to have a strong influence on a person's school and further performance in life. Research self-efficacy can be defined as one's confidence in his ability to successfully complete tasks such as literature reviews and data analyses (Büyüköztürk, Atalay, Sozgun, & Kebapçı, 2011). Forester, Kahn and Hesson-McInnis (2004) have emphasized that research self-efficacy is critical to lead a career in a science-related field and a proper evaluation of research self-efficacy may help students to discover their weaknesses and strengths in the course of research. In this context, research self-efficacy scale has been developed by Büyüköztürk et al. (2011) to be used in identifying the research self-efficacies of university students. Research self-efficacy opinions (one's perceptions of his ability to carry out a given research task) may influence the involvement or subject choice in research undertakings (Bieschke, 2006).

Differential item functioning is said to occur whenever the conditional probability,  $P(\theta)$ , of a correct response becomes different for two groups that either of them is reference and the other one is focal. Examinees at the same ability level but in different groups do not have the same probability success on the item. There is a difference between ICCs (item characteristics curves) of two groups (Camilli & Shepard, 1994).

## Purpose

The purpose of this study is to determine whether items of research self-efficacy scale indicate differential item functioning (DIF) in terms of the gender. In this study "differences item parameters method" was used for analysis of DIF.

## **Method**

A total of 549 students at different class levels and from public and foundation universities' educational faculties participated in the study. It was aimed to reveal a substantial situation in this study, and the method of study is survey in descriptive level (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2014)

In current study, PARSCALE, developed by Muraki and Bock (1996) was used for item parameter estimation for both groups and DIF analysis. The significance of the differences in these parameters was tested with chi-square statistics. Since the items of research self-efficacy scale are four-type Likert, the item parameters were estimated with graded response model (Samejima, 1969) which is one of the polytomous IRT model.

## **Importance of the study**

DIF studies have growing importance in psychological and educational testing and their central roles in modern, civil, society, three prominent professional organization: The American Educational Research Association (AERA), the American Psychological Association (APA) and the National Council of on Measurement in Education-NCME (Osterlind & Everson, 2009). The scores obtained from Research self-efficacy scale may be used in different fields, like education, psychology and personnel selecting. In the process of evaluating test takers especially from different demographic groups for a selection or classification decision, fairness in testing is closely related test validity.

## **Findings**

In our on-going process of evaluating the data, our initial results suggest that there might be several factors that may cause DIF in terms of gender in research self-efficacy scale. These factors may arise from cognitive differences between both groups, content of items and true differences of groups. The probability of endorsing categories may differentiate in male and female groups.

## **Conclusions**

Items having DIF on behalf of a subgroup may cause incorrect decisions and evaluations. So the scale may have problems about validity.

## **Suggestions**

Total scores from the scale including items with DIF, for measuring psychometric properties may cause erroneous interpretations of the findings. In this context, scale development and cultural adaptation studies should include investigation whether items have DIF, and test and item properties of scale.

**Keywords:** Research self-efficacy scale, differential item functioning, differences item parameters.

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## **Investigating The Dimensionality and Scalability of a Large Scale Exam by Means of Item Response Theory**

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Estimating student ability closer to its original value has been a purpose of education. As known, true abilities are latent variables and they can not be measureable directly. There are two theories for estimating true ability in Measurement and Evaluation area. One is Classical Test Theory (CTT) and the other is Item Response Theory (IRT).

There are many large scale tests applied contrywide in Turkey. All of these are applied based on CTT. Nonetheless CTT has many limitations such as same standart error for every responder, gathered test grades are ordinal scale, item parameters are sample dependent etc (Progar & Sočan, 2008; Embretson & Reise, 2000). IRT have been developed as an alternative to CTT especially after 70's in test development and has been increasingly widely accepted. IRT is based on two main proposition:

- a) Test performance of a subject on an item can be estimated by called latent trait or ability.
- b) Relation of the test performance of a subject on an item and trait which makes subject to answer that item can be shown with a curve called item characteristic curve (Ronald K. Hambleton, Swaminathan, & Rogers, 1991).

In IRT, a matemathical model which is called item charectheristic curve is used for describing the how subjects' ability affects the performance of that subjects' on a item. This curve represents the regression of probability of the answering item correctly on ability which is measured with that item. The shape of this regression curve changes depending on the number of parameters which will be used for describing the regresion curve. There are three item parameters for describing item characteristic curve. Item difiiculty (b) item discrimination (b) and guessing (c). Therere are different models in IRT based on how many of these parameters will be used (Crocker & Algina, 1986; Linden & Hambleton, 1997). There are three models in IRT; One parameter logistic model (Rasch Model) where only item difficulty is used, Two Parameter Logistic Model where item difficulty and item discrimination is used and Three Paramter Logistic Model where additionally to difficulty and discrimination guessing parameter is also used.

IRT has robust mathematical basis, however it has assumptions relatively difficult to met which compared to CTT. The first of these assumptions is unidimensionality of test or whether test has a dominant factor or not. Another assmption is local independence which means a subjects' answer on an item is not affected by the other answers on the other items of test. The last assumption is known as invariance which means ability and item parameters can be estimated independently of the sample

It is hard to say psychological constructs are unidimensional. Therefore multidimensional IRT models have been developed alternative to IRTs' unidimensionality assumption. The main postulate in multidimensional IRT is more than one cognitive ability can be measured with one item (akt. Sünbül, 2011). Multidimensional IRT models are divided in to two sections, one is known as Compensatory, compensate the lack of ability on a dimension with another ability and the second one known as Non-Compensatory which is vice versa (Ackerman, 2005; Ackerman 1989).

The purpose of this study is finding answers to these questions based on large scale distance education course exam results:

1. Whether the data are multidimensional or not?
2. Whether data are suitable to IRT scaling
3. Which IRT model fits the data better according to data are unidimensional or multidimensional

This study is designed to use Quantitative research methodology. Quantitative researches are defined as "explaining a phenomenon by collecting quantitative (numerical) data that are analysed using mathematically based methods such as statistics" (Aliaga & Gunderson ;2002).

First of all dimensionality analysis will be applied for the data gathered from exam. Unidimensionality analyses will be applied both using factor analysis by using SPSS for Windows and DIMTEST, a nonparametric technique which is developed by Stout in 1987. If data are multidimensional whether the dimensionality based on item structures overlapped or non-overlapped will be analysed. Overlapped dimensionality is an item measuring more than one dimension. Non-overlapped dimensionality is every item measuring different dimension. Multidimensionality is a special situation which special precautions have to be taken while calculating subjects grades both in CTT and IRT. If data are multidimensional weighted addition of each dimension has to be taken account while calculating subjects total score. Model-data fit indexes will be calculated to decide which IRT model fits best after deciding whether data are unidimensional or multidimensional.

The next step is analyse the data using IRTPRO for Windows software taking account the dimensionality. IRTPRO has become a popular software because of its user friendly general user interface. There are many softwares for analysing data using IRT based analyses. Most popular ones among them are BILOG, MULTILOG, PARSCALE and IRTPRO. All other softwares require writing syntax but IRTPRO. This syntax free gui makes IRTPRO the most popular software. We will decide that data fits better to which IRT Model.

**Keywords:** large scale exams, item response theory

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# **An Investigation of The Factors that Affect Turkish Students' Achievement in Mathematics According to the Pisa 2012 Results**

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The aim of this study is to determine the factors that affect the mathematics achievement of 15 year-old Turkish students' participated in PISA 2012 administration, based on student and school level. For this purpose following questions were examined respectively;

1. According to the PISA 2012 results, does the mathematics achievement of students vary across schools?
2. Which student characteristics have an effect on the difference of student mathematics achievement?
3. Which school characteristics have an effect on the student characteristics which are efficient in the mathematics achievement?

## **Method**

### **Study Group**

The sample of this study consist of 15 year-old students, were selected randomly from 170 schools and 57 cities according to the 12 NUTS in Turkey (OECD, 2013).

### **Variables**

The variables used in the study were discussed at two levels as student and school level. 37 indexes from student level and 25 indexes from school level were included in Hierarchical Linear Modeling (HLM). According to the results of analysis, however, 16 variables in student level and 5 variables in school level were found significant. Thus, only these variables which are Mathematics Anxiety (ANXMAT), ICT Entertainment Use (ENTUSE), Index of economic, social and cultural status (ESCS), Experience with Pure Mathematics Tasks at School (EXPUREM), Attributions to Failure in Mathematics (FAILMAT), Familiarity with Mathematical Concepts (FAMCON), Familiarity with Mathematical Concepts (Signal Detection Adjusted) (FAMCONC), Home educational resources (HEDRES), Attitudes Towards Computers: Limitations of the Computer as a Tool for School Learning (ICTATTNEG), ICT resources (ICTRES), Mathematics Self-Efficacy (MATHEFF), Mathematics Intentions (MATINTFC), Openness for Problem Solving (OPENPS), Mathematics Self-Concept (SCMAT), Subjective Norms in Mathematics (SUBNORM), Teacher Behavior: Student Orientation (TCHBEHSO) in student level; Mathematics Extracurricular activities at school (MACTIV), Proportion of mathematics teachers

(PROMATH), Quality of school educational resources (SCMATEDU), Student-Teacher ratio (STRATIO), Student-Related Factors Affecting School Climate (STUDCLIM) in school level were used in HLM.

### Imputation of the Rotated Context Questionnaire

In PISA 2012 student questionnaire, the rotation of context questionnaires (CQ) were implemented for first time. While ST01-ST28 items were in all rotated forms, but ST29-ST104 items were alternately used in student questionnaire forms (OECD, 2012). This situation causes a massive missing data in the student questionnaire data set. The rotated context questionnaires were imputed for dealing with this problem. In imputation of missing data, Predictive Mean Matching (PMM), works based on Regression imputation and hot deck matching, was used (Kaplan and McCarty, 2013).

### Data Analysis

2-level HLM analysis was used in the analysis of data. Three HLM models used for analyzing the data in the study. These are One-Way ANOVA with Random Effects Model, Random-Coefficients Regression Model, and Intercepts-and-Slopes-as-Outcomes Model. In the determination process of which variables will be included in the analysis, it is identified whether the variables predict mathematics achievement or not by entering them at each level to the model one by one and the random or fixed effects of slopes are significant or not. Variables which did not predict mathematics achievement significantly and slopes did not change randomly are excluded from the model.

As a result, only 16 indexes' constant effect were statistically significant of 37 indexes in Level-1 and these variables used in the model. And also only 5 indexes' constant effect were statistically significant of 37 indexes in Level-2 and these variables used in the model. Equation established in this study are given below.

*The Equation of Level-1*

$$\begin{aligned}
 (Y_{ij} \text{ IPV}_1, PV_2, PV_3, PV_4, PV_5) \\
 = \beta_{0j} + \beta_{1j}(\text{ANXMAT}) + \beta_{2j}(\text{ENTUSE}) + \beta_{3j}(\text{ESCS}) \\
 + \beta_{4j}(\text{EXPUREM}) + \beta_{5j}(\text{FAILMAT}) + \beta_{6j}(\text{FAMCON}) + \beta_{7j}(\text{FAMCONC}) \\
 + \beta_{8j}(\text{HEDERS}) + \beta_{9j}(\text{ICTATTNE}) + \beta_{10j}(\text{ICTRES}) \\
 + \beta_{11j}(\text{MATHEFF}) + \beta_{12j}(\text{MATINTFC}) + \beta_{13j}(\text{OPENPS}) + \beta_{14j}(\text{SCMAT}) \\
 + \beta_{15j}(\text{SUBNORM}) + \beta_{16j}(\text{TCHBEHSO}) + r_{ij}
 \end{aligned}$$

*The Equation of Level-2*

$$\begin{aligned}
 \beta_{0j} &= \gamma_{00} + \gamma_{01}(\text{MACTIV}) + \gamma_{02}(\text{PROMATH}) + \gamma_{03}(\text{SCMATEDU}) + \gamma_{04}(\text{STRATIO}) \\
 &\quad + \gamma_{05}(\text{STUDCLIM}) + u_{0j} \\
 \beta_{1j} &= \gamma_{10} \\
 &\quad \vdots \\
 \beta_{6j} &= \gamma_{60} + u_{6j} \\
 &\quad \vdots \\
 \beta_{16j} &= \gamma_{160}
 \end{aligned}$$

### Results

In the One-Way ANOVA with Random Effects Model; within school variability and between schools variability has been estimated to be 3160.658 and 5584.546, respectively. Accordingly, students' overall mathematics achievement has been found to significantly vary

among schools ( $p < 0.001$ ). And also intra-class correlation is calculated as 0.64 ( $\rho = \tau_{00} / (\tau_{00} + \sigma^2) = 5584.546 / (5584.546 + 3160.658) = 0.64$ ), which indicates that 64% of variability in mathematics scores is due to differences in mean school mathematics achievement.

In the Random-Coefficients Regression Model; at student level, the constant effects of 16 variables on mathematics achievement are statistically significant. While ANXMAT, FAILMAT, ICTATNE, ICTRES, SUBNORM and TCBEHSO negatively influenced students' mathematics achievements, other variables positively influenced students' mathematics achievements. The random effect of 16 indexes variables on mathematics achievement, only FAMCON-achievement slope's variance on mathematics achievement were statistically significant ( $p < 0.05$ ). In this model when 16 indexes were controlled, at student level and at school level students' mathematics achievement variance have been estimated to be 2509.471 and 5603.144, respectively. The explained variance is calculated as 0.206 ( $(\sigma^2(\text{Model 1}) - \sigma^2(\text{Model 2})) / (\sigma^2(\text{Model 1})) = 0.206$ ). It means that, these 16 variables explain approximately 21% of within school variability.

Finally, it was found that according to the results of Intercepts-and-Slopes-as-Outcomes Model, which based on school-level variables added into the model, at the effect of only 5 of 25 variables was statistically significant. These variables are Mathematics Extracurricular activities at school (MACTIV), Proportion of maths teachers (PROMATH), Quality of school educational resources (SCMATEDU), Student-Teacher ratio (STRATIO), Student-Related Factors Affecting School Climate (STUDCLIM). Adding these variables into model, average mathematics achievement has been estimated to be 3122.4. The explained variance is calculated as 0.44 ( $(\sigma^2(\text{Model 1}) - \sigma^2(\text{Model 2})) / (\sigma^2(\text{Model 1})) = 0.441$ ). It means that, adding these variables into the model explains %44 of between school variability.

## Conclusion

In conclusion; the school level variables were more efficient than the student level variables in predicting the variance of mathematics achievement. The results indicated that the variables at school level which are Mathematics Extracurricular activities at school (MACTIV), Proportion of mathematics teachers (PROMATH), Quality of school educational resources (SCMATEDU), Student-Teacher ratio (STRATIO), Student-Related Factors Affecting School Climate (STUDCLIM) significantly predict the mathematics achievement. In the course of student level variables, while ANXMAT, FAILMAT, ICTATN to, ICTRES, SUBNORM and TCBEHSO, had a negative relation with achievement, the other variables of student level had a positive relation. From these variables, the MATHEFF variable was the most efficient one in predicting the achievement.

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## Comparing Classic Test Theory and Item Response Theory Based Ability Estimates of a Large Scale Exam

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In Turkey, Open and distance education institutions' measurement and evaluation activities are made by using multiple choice questions. All of these exams grade are scaled by using Classical Test Theory (CTT). As an alternative to CTT, it is required to how well Item Response Theory which is being used since 70's is performing on countrywide large scale exams has to be shown. In this study, student grades on an exam which are calculated both according to IRT and CTT are aimed to be compare.

CTT which is traditional test theory is criticized because its' limitations and inability to innovation because of these limitations. These limitations are listed in literature as same standart error for every responder, gathered test grades are ordinal scale, item parameters are sample dependent etc (Progar & Sočan, 2008; Embretson & Reise, 2000). IRT have been developed to solve these limitations and IRT has two main propositions. These are:

- a) Test performance of a subject on an item can be estimated by called latent trait or ability.
- b) Relation of the test performance of a subject on an item and trait which makes subject to answer that item can be shown with a curve called item characteristic curve (Ronald K. Hambleton, Swaminathan, & Rogers, 1991).

IRT has robust mathematical basis, however it has assumptions relatively difficult to met which compared to CTT. The first of these assumptions is unidimensionality of test or whether test has a dominant factor or not. Another assumption is local independence which means a subjects' answer on an item is not affected by the other answers on the other items of test. The last assumption is known as invariance which means ability and item parameters can be estimated independently of the sample.

In IRT, a matematical model which is called item charectheristic curve is used for describing the how subjects' ability affects the performance of that subjects' on a item. This curve represents the regression of probability of the answering item correctly on ability which is measured with that item. The shape of this regression curve changes depending on the number of parameters which will be used for describing the regresion curve. There are three item parameters for describing item characteristic curve. Item difiiculty (b) item discrimination (b) and guessing (c). Therere are different models in IRT based on how many of these parameters will be used (Crocker & Algina, 1986; Linden & Hambleton, 1997). There are three models in IRT; One parameter logistic model (Rasch Model) where only item difficulty is used, Two Parameter Logistic Model where item difficulty and item discrimination is used and Three Paramter Logistic Model where additionally to difficulty and discrimination guessing parameter is also used.

In order to scale an exam to IRT first step is to test whether unidimensionality and local independence assumptions are satisfied or not. If these assumptions are met one, two or three parameter model fit analyses are done in order to test which model fits the data. The model which fits the data better is chosen. The next step is testing the item and ability parameters' invariance assumption according to chosen model. After all assumptions are met the data will be considered as suitable to scale by IRT.

In this study this question will be answered:

- Is there a high and significant relationship between ability parameters gathered either by IRT or CTT

This study is designed to use Quantitative research methodology. Quantitative researches are defined as "explaining a phenomenon by collecting quantitative (numerical) data that are analysed using mathematically based methods such as statistics" (Aliaga & Gunderson ;2002).

First of all dimensionality analysis will be applied for the data gathered from exam. Model-data fit indexes will be calculated and tested to see whether there is significant difference among them to decide which IRT model fits best the data. Next step is testing parameter and ability invariance. IRTPRO will be used to calculate subjects' IRT based ability estimates, SPSS will be used to calculate CTT based ability estimates. Finally correlation will be calculated to test whether there is significant relation between these parameter estimates. IRTPRO has become a popular software because of its user friendly general user interface. There are many softwares for analysing data using IRT based analyses. Most popular ones among them are BILOG, MULTILOG, PARSCALE and IRTPRO. All other softwares require writing syntax but IRTPRO. This syntax free gui makes IRTPRO the most popular software.

**Keywords:** large scale exams, item response theory, classical test theory

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# Assessing the Underlying Structure of Response Data Using a Multi-group Structural Equation Modeling Approach

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In many education settings, the growing interest in direct performance assessment has prompted the development of performance-based examinations. To date, however, it remains a challenge to ensure the reliability and the validity of the inferences made from the scores obtained through such non-conventional assessments (Messick, 1996). Many professionals face various challenges in practice not only when planning performance-based teaching practices but also when monitoring the overall quality of their performance assessments in evaluating the performances of examinees in an ongoing basis (e.g., Kane, Crooks & Cohen, 1999; Metha & Neale, 2005; Goldstein, Bonnet & Rocher, 2007). To address some of the issues, this study proposes a multi-group structural equation approach.

Although in non-conventional teaching practices that utilize performance-based assessments, examinees are assessed largely as a function of “educational objectives”, i.e., how well they perform on the process associated with a performance item or a case problem, rather than solely as a function of the ultimate (correct) product, it would be of interest, from a diagnostic purpose, to investigate whether the underlying structure of the response matrix observed from a conventional multiple choice test would differ for examinees who are thought and assessed by non-conventional means of assessments when compared to those who are thought and assessed by conventional means of assessments.

## **Purpose**

This paper demonstrates how a general multi-group latent trait modeling approach based on structural equation modeling can be used to evaluate differences in examinee performances across distinct examinee subgroups. The application presented uses data collected from several undergraduate classrooms that were thought and assessed with and without a performance-based evaluation system.

More specifically, this study provides an application of a multi-group factor analytic approach to illustrate how measurable differences in the proficiency levels of distinct examinee groups can be studied through a multi-group factor analytic model to highlight situations, in which the influence of additional group factors, such as, examinees' motivation levels, on the outcome variables of interest can also be tested.

The methodology presented is intended for teachers who use performance-based training practices and proposes a psychometric tool that can be useful in assessing the degree to which the meaning of the construct measured by an assessment shifts across groups when a conventional versus a non-conventional mode of assessment is used throughout the coursework.

### **Method**

Multi-group extensions for measurement models were explored as early as 1970s (Joreskog, 1971; Muthen & Christoffersson, 1971; Kaplan, 2008) to investigate construct bias, which implies that a test measures something different in one group than in another (e.g., Reynolds & Suzuki, 1990). Although there is an ongoing debate in the literature about the steps and the ordering of the steps, applications of multi-group models involve statistically comparing nested measurement models with varying group constraints to evaluate whether the model fit improves. If no source of measurement invariance is found, this means that the meaning of the latent construct is shifting across groups.

For the current study, a set of single and multi-group factor models will be estimated for data collected from four separate classrooms of students who are following the same undergraduate course for a semester. Several sources of data will be collected and analyzed simultaneously: response data from a multiple-choice ability test, proficiency ratings from student portfolios, and ratings from a questionnaire addressing several related questions (student motivation levels, etc.). The latent trait structure underlying the response data will be compared for students who belong to different classrooms given their differing proficiency and motivation levels. Both group-generic and group-specific person and item (difficulty, discrimination and error variances) parameter estimates will be obtained and compared to determine the underlying factorial structure.

### **Findings**

Our initial results suggest that multi-group structural equation modeling could be a promising tool for obtaining useful group-specific person and test statistics that could help collect validity evidence. It is expected that group-specific person and item parameter estimates may help quantify whether the underlying structure of test data confirms our expectations and, moreover, may help us identify weaknesses and strengths of our assessment tools, conventional versus non-conventional. Information obtained through the use of multi-group modeling, then, can be used in diagnosing classrooms and individual students that are in need of close monitoring and further training.

### **Conclusions**

Availability of group-specific person and test statistics would help monitor performance of classrooms and individual students from distinct subgroups to evaluate the usefulness of various modes of teaching and assessment.

### **Suggestions**

A multi-group perspective in modeling examinee proficiency is highly recommended to help (1) uncover psychometric properties of varying assessment formats, (2) explain differences in examinee performance, and (3) identify gaps in our understanding of what makes an assessment mode more preferable given a context.

**Keywords:** Performance assessment, multi-group, structural equation modeling, parameter invariance, validity

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# **The applicability of CAT Form of an English Test for Classifying Examinees into Three Proficiency Categories**

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Computerized adaptive testing (CAT) which is a test administration system that uses computer to select and deliver test items to examinees. In adaptive tests, the item selection method that maximizes the item information at current ability estimate (Orcutt, 2000; Weiss, 2004). CATs were originally developed to obtain an efficient estimate of an examinee's ability/proficiency estimation. However, CATs have also shown to be useful in classification problems (Lewis and Sheenan, 1990; Spray and Reckase, 1994; Eggen, Straetmans, 2000; Nydick, Nozawa, Zhu, 2012). When the purpose of the test is to assign an examinee to two or more proficiency categories along the theta continuum, it is called Computerized Classification Testing (CCT) (Eggen, Straetmans, 2000). CCT applies adaptive testing methodology to decrease the number of items administered to a given examinee described beside CATs for situations in which the main interest is estimating the ability of an examinee in classifying the examinee into two or more than two categories. In this study, the implementation of UDS-English test as CCT based was investigated in terms of precision of measurement and usability of measurement.

In this respect, the study addresses the following research questions:

- 1) In condition of the real data (k=80 items);  
Is there a significant difference between simulative regular CAT based UDS-E and simulative CCT based UDS-E in terms of precision of measurement and test information and test usability?
- 2) In condition of the simulated data with uniform distributed and large size item bank (k=160 items),
  - 2(a) Is there a significant difference between simulative CAT based UDS-E which has similar data and item parameter features with real data, in terms of precision of measurement and test usability?
  - 2(b) Is there a significant difference between simulative CAT based UDS-E which has uniform distributed data and ideal item parameter features, in terms of precision of measurement and test usability?

## **Method**

### **Research Design**

This study is correlational research, unlike experimental research does not involve the manipulation of independent variables, instead, correlational research assess the relations among naturally occurring variables with goal of identifying predictive relationship. (Shaughnessy and Zeichmeister, 1997, p.119,130). In this study, relationships between real data and simulated data obtained from UDS-English test as CCT were compared in terms of precision and usability of measurement.

## **Participants and Data**

In this study, three types data were used. One of them was real UDS English Test data, other two data are generated for simulation study.

At first, 2005 UDS- English for Social Sciences' items and response data were used. This data from 3723 examinees with 80 binary items which were taken with permission from OSYM in 2005. Examinees were from social sciences, arts and humanities. The data showed a dominant unidimensional structure and items were already calibrated according to 2PL model by BILOG-MG. The distribution of items' b values and a values and their median values varied respectively between - 2.05 and 6.0 (median: 0.857); 0.13 and 1.26, (median: 0.66). These values demonstrated that this test was moderately difficult and discriminative.

## **Data Analysis**

This data was run to answer for research question 1. For this purpose, CatIrt package with R code (R Development Core Team, 2007) was used which is developed by Steven Nydick (Nydick, 2012). This procedure gave us simulated CAT and CCT applications and their standart error of measurement and test information in terms of precision of measurement. Also we obtained the numbers of item in CAT and CCT application.

To find out to answers for question 2a and 2b, the simulated CCT applications based on real and generated data was carried out by the Sequential Probability Ratio Test (SPRT) (Wald, 1947) The most commonly used sequential algorithm in CCT is SPRT. SPRT determines when enough independent and identically distributed data have been collected to choose between one of two simple hypotheses. The classic SPRT in classification CAT ( Reckase, 1983; Spray & Reckase, 1986; Eggen, 1999) starts out by defining a simpler form of the classification problem. In all CCT simulation applications, Fisher's MI (maximum information) was used as an item selection method.

## **Results**

The results defines that there is no significant difference between theta estimations from full bank CAT and CCT simulations. This procedure is based on small size item bank (K=80) which doesn't give different theta estimations in terms of regular CAT and CCT applications. Also, result shows that, even other conditions were equal (theta distributions, average characteristics of items), regular CAT applications give more precise measurements in larger item banks.

## **Conclusions and Suggestions**

Findings were compared in terms of standart error of ability estimation so there is no meaningful difference between range of full bank theta and CCT theta estimation. Persons were classified in three language proficiency level. Findings were discussed with related literature.

**Keywords:** Computerized adaptive testing, computerized classification testing, competency level

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# Type I Error Rate and Power Study of $K$ Indices for Detecting Answer Copying

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Cheating is a big treat for the validity of a test. To control this treat copy detection indices were developed in order to be useful for detecting cheating. There are several classifications for cheating detection methods. One member of these classifications is copy detection method which depends on statistical evidences.

The purpose of this study is to investigate the Type I error and power rate of  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices which are members of indices related with statistical evidences.

To investigate the Type I error and power rate of  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices, 5 category multiple choice data were generated according to Nominal Response Model by codes written in R programming language. Sample size (100, 500, 2000), test length (40, 80) and source ability level range (40-49%, 50-59%, 60-69%, 70-79%, 80-90%) are used as simulation criteria for Type I error study. In addition to these factors, amount of cheating (10%, 20%, 30% and 40%) is added as another factor for Power study. For each condition, 100 replications were conducted. As a result for Type I Error,  $3 \times 2 \times 5 \times 100 = 3000$  data, and for Power study,  $3 \times 2 \times 5 \times 4 \times 100 = 12000$  data were generated.  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices were investigated under 4-row classroom sitting plan limitation.

R codes were written to calculate  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices. Results of calculation were arranged and stored in matrices to investigate Type I Error and Power rates. All investigations were made both for the main and interaction effects of simulation criteria. Results were demonstrated for main effects by using univariate line graphs and multivariate dot plots for interaction effects. Graphic codes were written in R language.

When main effects of all simulation criteria for Type I error were checked, it was observed that average empirical Type I Error rates were all below of all nominal  $\alpha$  levels. In addition to that, a slight increase was observed with sample size increase. All of indices generated the lowest error rate for 100 sample size. As an exception; for 0.05 nominal  $\alpha$  level for 500 and 2000 sample size,  $\bar{K}_1$  and  $\bar{K}_2$  did not alter. However;  $K$  index tended to increase with the increase of sample size. For 0.05 nominal  $\alpha$  level error rate,  $K$  index tended to have a slight decrease when the test length increased. It was observed that for other  $\alpha$  levels, error rates were 0 or very close to 0. Results of the investigation of the main effect for the source ability level range showed that when the source ability level range yielded between 60-69% of the sample, error rate got the highest value. If source ability level range yielded between 50-59% or 80-90% of the sample, the lowest error rates were obtained. Despite the fact that  $\bar{K}_2$  index tended to be higher than others, all error rates were below the related nominal  $\alpha$  levels. As a result, it can be claimed that all indices performed well and generated lower average Type I

Error rate than related nominal alpha levels. Results of interaction effect investigations for Type I Error showed that error rates were below the related  $\alpha$  levels. However, for the condition with 2000 sample size, 80 test length and 60-69% source's ability range; high error rates were observed for 0.05 nominal alpha level.

Results of the power study showed that all of average empirical power rate of  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices were higher than related nominal  $\alpha$  level. Quite satisfactory results have been reached for empirical power rates.  $\bar{K}_1$  and  $\bar{K}_2$  indices performed very close to each other and better than  $K$  index.

According to the results of main effect investigation; when sample size increased, power rate of  $K$  index tended to increase but very small changes were observed for  $\bar{K}_1$  and  $\bar{K}_2$  indices. In addition to that, the increase of test length or amount of cheating increased the power of indices. For 100 sample size,  $K$  index had lower power rates. When source ability level range was between 60% and 79%, indices performed better than other ranges. Indices got their lowest value for 40-49% and 80-90% levels. When cheating amount was 40%,  $\bar{K}_1$  and  $\bar{K}_2$  tended to be very close to perfect power rate 1.

As a result; for each condition, each indices performed well and showed lower Type I empirical error rate than related alpha level. According to these results; it can be claimed that the probability of making false positive decision by using  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  is very low. In addition to that,  $\bar{K}_1$  and  $\bar{K}_2$  are more powerful than  $K$  index. For small sample sizes and 10% amount of cheating condition, all indices performed badly in detecting cheating in terms of power. When amount of cheating was 40%, it was observed that  $\bar{K}_1$  and  $\bar{K}_2$  were very powerful. Sample size had a negligible effect for  $\bar{K}_1$  and  $\bar{K}_2$ . Another result related with sample size was that  $K$  index performed better for large sample sizes.

**Keywords:**  $K$ ,  $\bar{K}_1$  and  $\bar{K}_2$  indices

## How Teacher Variables Do Influence PISA Mathematics Performance of Schools

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In this rapidly growing competitive global economy, countries participate in a number of international assessments that measure mathematics achievement of their students against international benchmarks. One of the studies organized by OECD is the Program for International Student Assessment [PISA]. The primary aim of the PISA was to compare 15-year old students at a given level of schooling in key subjects, such as Mathematics, Reading and Science across countries. PISA is unique in that it differs from other international assessments, because PISA emphasizes the application of knowledge to real life situations. According to PISA 2012 results, the average proficiency of Turkish 15-year old students at mathematics domain has been ranked below the OECD mean (OECD, 2014). PISA results are significant for Turkey, because it gives students, teachers, educational researchers and policy makers comprehensive data not only on student achievement, but also on family, teacher or school related factors that can determine mathematics literacy performance.

Most of a student's educational experiences at school occur in the classroom. Here, the student is exposed to subject content, curriculum materials, instructional strategies and to the specific composition of, and climate within the class. As previous research has shown that teacher characteristics and practices are more closely associated with student performance than more school-level and system-level conditions (Wayne and Youngs, 2003). Research has shown that student learning is generally supported by a positive and respectful atmosphere that is relatively free of disruption and focused on student performance. Well-structured lessons with close monitoring, supportive, student-oriented classroom climate, clear classroom management, clarity of presentation and informative and encouraging feedback are linked positively to student performance. (Creemers and Kyriakides, 2008; Harris and Chrispeels, 2006; Klieme, Pauli and Reusser, 2009). These components may help create an orderly classroom environment and maximise effective learning time.

In this context, knowing which factors are related to the students' mathematics literacy performance can provide important opportunities to guide educational policies. We need to understand how teacher background variables relate to and interact with each other in the development of mathematics skills. The results of the data analysis that follow will bring to focus the impact teacher related factors on the achievement of 15-year old students. This current study aimed to investigate teachers' behaviors' affecting on low and high performing schools with regard to mathematics achievement on PISA 2012. Data was collected from eight graders tests on math regarding achievement and cognition. The variables were chosen based on the assumed relationship between students' achievement and teacher features. In that sense, the variables of "Mathematics Teacher's Classroom Management, Disciplinary Climate, Mathematics Teacher's Support, Teacher Student Relations, Teacher Behaviour:

Formative Assessment, Teacher Behaviour: Student Orientation and Teacher Behaviour: Teacher-directed Instruction” were chosen as predictive variables in terms of index values in determining student achievement in math. Due to the fact these variables could not be measured directly, the index values were calculated by combining the different items utilized from the questionnaires. The approaches based on data item response theory or transformation methods are utilized in obtaining these index values. Data for the current study were obtained from the OECD's official website. The research data consisted of 605 Turkish students from 30 schools. The average of students was calculated as in low-performing schools 363,805 and in higher performing schools 606,444. Prior to data analysis, 8th grade level of all schools (150) in Turkey which participated in PISA 2012 applications ranked in terms of average mathematics achievement scores; than schools selected for analysis considering 10% of average ranking points at the top and the bottom of schools from all data. Cases of the other schools were considered as moderately performing schools and excluded from the data set.

The binary logistic regression analysis was used to analyze data. Before interpreting the results for logistic regression analysis assumptions (multicollinearity, extreme values and model data fit) were tested. The regression coefficients for independent variables, Wald statistic and degrees of freedom, standard error and 95% confidence intervals, odds (likelihood) ratio and correct classification rates were calculated. The data fit established with this logistic model, and tested by Hosmer Lemeshow test. The results suggested that the model was acceptable data fit. Data have been analyzed with SPSS 21 (Statistical Package for The Social Sciences).

The results indicated that the variables (Mathematics Teacher's Classroom Management, Disciplinary Climate, Mathematics Teacher's Support, Teacher Behaviour: Formative Assessment and Teacher Behavior: Student Orientation) differed significantly between schools regarding high and low performance. By Nagelkerke  $R^2$  statistics, related variables have explained 37.8% of the school performance variance. Moreover, the most important variables for the classification of the school have been found to be respectively Disciplinary Climate, Mathematics Teacher's Classroom Management and Teacher Behavior: Formative Assessment variables. One unit increasing in these variables was increased the schools' probability of high performance by respectively 2.095, 1.782 and 1.544 times. In logistic regression model that established observations of correct classification rate has been found as 72.7%.

**Keywords:** PISA, teacher effectiveness, mathematic achievement, logistic regression analysis

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## **Effect Of Student Achievement Motivation Of Teachers (Singapore, Japan, Finland And Turkey Sample)**

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In the literature, the teacher has training and experience, such as characteristics of student learning and is associated with the success that reveals a number of international research (Nye, Konstantopoulos, and Hedges 2004; Rivkin, Hanushek, and Kain 2005). Wayne and Youngs (2003), a healthy approach to researchers and policy makers seeking ways to improve teaching and learning as indicated by the teacher to focus on. Wayne and Youngs argued that both the perception that motivated justification for this proposal is due to teachers entering the largely course of student achievement of experimental research and teachers' salaries, the primary budget is the most fundamental source of the system of teachers emphasized that accounts for the largest share. Cemaloglu and Erdemoğlu (2007) in their study, students in the teacher's business environment, parents, administrators and staff often and long as the build relationships face to face, stated that increasingly crowded grades work affect teacher motivation.

The aim of this study was to What is the relationship between motivation of the PISA 2012 application in the age group 15 students with science and mathematics teachers in the school science and math literacy is to answer the question. The impact on academic achievement in science and mathematics literacy in PISA 2012. In this context, the application of science and mathematics teachers in schools participating in the student motivation, job satisfaction has been determined. Situated in the PISA 2012 implementation of the school survey study, "To what extent do you agree with your school about the teacher the following statements?" According to the answers given by the agent to the school administrators and students of teacher motivation in science and mathematics literacy focuses on how this is determined that leads to change.

PISA, Programme for International Student Assessment (Programme for International Student Assessment) to overcome the difficulties they face in everyday life of young people focuses on the ability to use their knowledge and skills. This perspective is different from traditional academic achievement tests leads to modification of its objectives of the curriculum. In other words, the course objectives of the program focuses on what they can do with students learn in school that they learned a lot. PISA exams and surveys carried out in a three-year period from all three subject areas (reading literacy, mathematics literacy and science literacy) is given to one. PISA exam and 15 year old students' reading skills in the survey, science and math literacy competencies in the fields, mathematics, evaluation of interests and attitudes towards science and reading skills, the education system stronger and improve the identification of clear direction and work aims to contribute to raising the quality and success in education (OECD, 2012).

In this study, PISA 2012 application to join the Singapore, Japan, is intended to determine if the student is 15 years of age in Finland and Turkey sample of science and mathematics okyuryazarlık and academic achievement leads to how a change by acting teacher motivation

within the selected study variables. In general, the study "differences motivation of teachers is how to turn lead to a change in students' mathematics and science literacy?" Has to answer the question. The model for this study is a descriptive sense operation. Descriptive analysis is a type that includes summarizing and interpreting qualitative data analysis based on pre-determined themes of the data obtained with different data collection techniques. Type in a descriptive analysis of the findings summarized the reader with the help of the data obtained is presented in a way that the main objective and interpreted (Yıldırım and Şimşek, 2003). In this study, science teachers and students how to determine the effect of changes in students' science achievement and factors varies according to the results obtained make comparisons in this regard, is aimed to make the common generalization. In addition, proposals have been developed in the light of the findings obtained for students to improve the regulation of science and math literacy.

When we look at the descriptive analysis of the results of teacher morale in the school in which they work, 59% in Finland, 27% of teachers in Turkey is seen that a very high level. The average academic achievement of students is high or low morale of teachers in science and mathematics in Finland is changing points 2 and 1 points. This change is 83 and 79 points in Singapore. When we look at the work efforts of teachers, teachers of 29% in Finland and 32% in Singapore is said to be very diligent. In Finland, teachers of the school to work diligently average academic achievement of students is changing science and mathematics 9 and 4 points. This change is 33 and 37 points in Singapore. According to the teachers at the school are proud of the teachers of 38% in Finland and 25% in Singapore, it is stated that they are very proud. Students are proud of the school's teachers in Finland, the average academic achievement in science and mathematics is changing 9 and 4 points. This change is 90 and 92 points in Singapore. According to the academic success of appreciation to teachers, the academic achievement of 64% in Singapore, 69% of teachers in Finland have revealed that they too appreciated. Appreciated the teacher's academic achievement in Finland to the average academic achievement of students in science and mathematics is changing 5 points. This change is 119 and 97 points in Turkey. Teachers 'job satisfaction and motivation of this study show that the differences between countries and showed that cause changes in the students' academic achievement in these differences.

**Keywords:** PISA, science and mathematic literacy, motivation, student achievement.

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# Content Analysis of Research Articles in Measurement and Evaluation Journals

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The main purposes of the research in the field of measurement and evaluation are to enhance the quality of education and training and to provide more reliable and valid decision about individuals (Baykul, 2000; Linn and Gronlund, 1995). Thanks to advances in computer technology, new statistical approaches which serve a purpose are used. New advances in this field can be followed by examining research papers, thesis/dissertations, projects, etc. Carefully examining the research products periodically is important for every discipline (Staton-Spicer and Wulff, 1984). The direction of changes and trends of research studies can be determined as research studies on one of the disciplines are examined (Ozan and Köse, 2014; Selçuk, Palancı, Kandemir and Dündar, 2014). Examining and criticizing of periodicals is not commonly used method in the literature. However, conducting such studies is important in terms of determination of points to be studied (Arık and Türkmen, 2009).

This paper aims to identify types of data collection tools, data analysis methods, software and descriptive of participants, sample size, number of authors, current trends in the choice of topics of research articles published in the measurement and evaluation journals indexed in Social Science Citation Index (SSCI) between 2012 and 2014. Determination of trends and profile of measurement and educational journals having highest impact factors would provide beneficial information to researchers, journal editors and reviewers in this field.

## Method

Content analysis is employed as the research method in this study. Content analysis is a scientific approach which investigates social reality through written and other materials' objective and systematic categorization, converting into numbers and subtracting in terms of the comprised messages through its meaning (Tavşancıl and Aslan, 2001). The journals were selected by using purposive sampling technique. Criteria for selecting journals were as follows: (i) scope of educational science, (ii) including "Measurement or Evaluation or Assessment" in the title, (iii) having highest impact factor. According to 2013 Journal Citation Report (JCR) Social Science, these journals and their impact factors were as follows: Educational and Psychological Measurement [EPM (IF: 1.167)], Journal of Educational Measurement [JEM (IF: 0.867)] and Applied Measurement in Education [AME (IF: 0.632)]. There are a total of 268 articles published in these journals in between 2012 and 2014. A coding sheet was utilized to collect the relevant data for content analysis. This sheet is prepared with regard to research questions by author. The sheet included seven main sections such as research topics, number of author, sample size, the sample age group, instruments types of data collection tools, data analysis methods and software. The results of content analysis were descriptively presented in the forms of charts and frequencies tables.

## Findings

The current study found that 22% of papers focused on "item response theory", 11% of them focused on "differential item functioning", 6% of them included "measurement", 5% of them handled "computer adaptive test" and "multilevel" as keyword in EPM. On the other hand,

29% of papers included “equating”, 11% of them included “assessment” and “item response theory”, 9% of them included “validity”, 5% of them included “computer adaptive test” and “multilevel” as keyword in JEM. Additionally, 24% of papers included “assessment”, 17% of them included “standard setting”, 12% of them included “differential item functioning”, 10 % of them included “computer adaptive test” in JEM. The most common keywords were “item response theory” (f:44), “differential item functioning” (f:26) and “equating” (f:26), “assessment” (f:24) in these three journals. Another finding from the current study was that average number of authors was 2.7 in EPM, 2.6 in AME, 1.99 in JEM. In other words, approximately two or three authors were conducted research studies in the stated journals. This study also indicated that 73 papers were simulation studies, 58 papers were empirical studies and 5 were designed as both simulation and empirical studies. On the other hand, while 7 out of 42 papers in AME were simulation studies, remaining ones were empirical studies. While 32 out of 75 papers in JEM were simulation studies, 16 out of them empirical studies, remaining ones were both simulation and empirical studies. In addition, the other studies examined in this study were theoretical studies and studies in which mathematical formulation was revealed. In a sense, while EPM and JEM include more simulation studies than empirical studies, AME includes more empirical studies. This study also showed that the average sample size was 9588 in AME, 7097 in JEM and 7035 in EPM in simulation studies. For empirical studies, the average sample size was 43025 in JEM, 39470 in AME and 25313 in EPM.

### **Conclusions and Suggestions**

In general, it seems that “item response theory” is the most common study context in all three journals. Also, DIF studies took part in EPM, “equating” studies took part in JEM, “standard setting” studies in AME frequently. When it comes to finding regarding sample characteristics of papers, authors chose to investigate students from 3-11 grades mostly. It can be seen that the authors also prefer to conduct studies with university/college students. In addition to this, results indicate that samples of papers in EPM are heterogeneous (older adults, unemployed, managers etc.) in terms of participants characteristics.

**Keywords:** measurement and evaluation, research trends, content analysis

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## Accuracy of Random Group Test Equating Methods

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The purpose of this study was to compare the test equating methods under various variables such as sample size, average difficulty differences between forms and guessing parameter for estimating the equating bias (BIAS) and equating errors (RMSE) under the random groups design with various equating methods.

In this study, simulated data were generated with three parameter logistic model (3PLM) based on Item Response Theory (IRT). Firstly, population with 10000 individuals was generated under the random groups design for each form (X and Y). Each form consists of 30 dichotomous items. 4 forms for X and 16 forms for Y, totally 20 forms consistent with the variables studied and their levels were simulated.

Identity Equating, Mean Equating, Linear Equating, Circle Arc Equating, 3th and 4th moments pre-smoothing polynomial log-linear (LLC3 and LLC4) equipercentile equating methods were used to equate the simulated test forms. These methods were carried out on the simulated tests with three different levels of mean difficulty differences (0.10, 0.40 and 0.70) and four different levels of guessing parameter (0, 0.10, 0.20 and 0.25) for six sample sizes (200, 400, 750, 1500, 3000 and 5000) with 100 replications. Codes which were written in R.3.2 programming language was used to generate data and equate the simulated forms. Equating methods were examined and evaluated by two statistics: root mean square error of equating (RMSE) and its component of equating bias (BIAS).

In the study, firstly, dichotomous data in each row were summed so that raw scores were obtained. Descriptive statistics were computed for each form so that it is controlled that the simulated data is correct for this study. Equipercentile equating method was used as a criterion equating to control accuracy of equating on all population. 100 different random samples were drawn for each sample size. Form X was equated to Form Y scale and equated scores were computed. After equating procedure, BIAS and RMSE statistics were computed for all sample sizes and for each equating methods in this study. Subsequently, main effect and interaction effect graphs were plotted.

The findings about main effect of guessing parameters suggest that manipulating the guessing parameters causes to change BIAS and RMSE of equating methods. When guessing parameter is between 0 - 0.10, BIAS and RMSE of all equating methods except for Identity Equating increase scarcely. While guessing parameter is between 0.10 - 0.20, BIAS and RMSE values of all equating methods increase. When guessing parameter is between 0.20 - 0.25, values of BIAS of all methods and RMSE values of all equating methods except for LLC3 and LLC4 equipercentile equating methods decrease slightly. BIAS of Identity equating is affected irregularly by manipulating guessing parameters. BIAS and RMSE of

Circle Arc method is affected, by the guessing parameters much more than the other methods. LLC3 and LLC4 equipercentile equating methods have the lowest equating errors (RMSE). When the difficulty differences between forms increase, whereas BIAS and RMSE of LLC3 and LLC4 equipercentile equating methods decrease slightly, BIAS and RMSE of other methods increase. When the difficulty differences between forms are low (0.1), Circle Arc method has the lowest equating error. The more difficulty differences between forms, the more RMSE of LLC3 and LLC4 equating method. RMSE of LLC3 and LLC4 equating methods are lower than the others.

The findings about main effects of sample size to equating methods suggest that changing sample size does not affect BIAS of any equating methods. Beside this, LLC3 and LLC4 equipercentile equating methods have the lowest BIAS values. When sample size is increased, RMSE of all equating methods except for Identity Method decrease. When sample size is small (i.e 200) Circle Arc and Mean equating methods have lower RMSE than the others. However, when the sample size is increased, LLC3 and LLC4 equipercentile equating methods have the lowest equating error (RMSE).

The findings about the interaction effect of the studied variables on BIAS of equating methods indicate that when the average difficulty differences between forms are increased, equating BIAS of all methods except for LLC3 and LLC4 equipercentile equating methods increases. While Circle-Arc equating method has the largest BIAS values, LLC3 and LLC4 equipercentile equating methods has the lowest BIAS values. BIAS of all methods are increased slightly by increasing the guessing parameter at the low average difficulty differences between forms. When the average difficulty differences between forms are larger, BIAS of all methods except for LLC3 and LLC4 equipercentile equating methods increase and BIAS of LLC3 and LLC4 equipercentile equating methods does not alter. When the sample size is increased, BIAS of all methods does not change.

The findings about interaction effects of all variables to RMSE of equating methods indicate that increasing the sample size caused to decreasing equating error (RMSE) of all equating methods except for Identity Method. When the sample size is increased, RMSE of LLC3 and LLC4 equipercentile equating methods decrease more than the others. When the average difficulty difference between forms is larger and when sample size is increased, RMSE values of LLC3-LLC4 equipercentile methods are become larger than RMSE values of other methods. It is resulted that changing guessing parameter did not affect equating error values of equating methods except for Circle-Arc. Increasing the guessing parameter causes increase in equating error value of Circle Arc.

Consequently, Circle-Arc and Mean Equating Methods have less error values only when sample size is small and average difficulty differences between forms is low. LLC3 and LLC4 equipercentile equating methods are more accurate than the others under most of the conditions studied.

**Keywords:** Test Equating, Equating Error, Equating Methods

## **Comparison of Dichotomous Item Response Theory Models in Terms of Test Information Function**

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In educational settings researchers and practitioners are interested in students' attributes such as achievement, intelligence, aptitude, ability, skills, attitudes, interests and motivation. These attributes are defined as psychological constructs since they could not be observed and measured directly. Psychological constructs are measured by observing the behaviors which are accepted as indicators of these constructs (Lord & Novick, 1968; Embretson & Reise, 2000). Therefore, information is obtained about the individuals in terms of the related attributes obtained through psychological measurement tools such as tests, scales questionnaires. A test is a measuring tool that describes numerically the degree of amount of the interested construct individuals have under standardized conditions. Tests contain a set of test items to measure the related constructs and they are used for many purposes in educational settings. According to the results obtained from these tests, many decisions are made about the students such as admission and placement to some programs. Therefore it is important to get valid and reliable measures (Haladayna, 2004). Regardless of the purpose of measurement, tests are required to have the psychometric properties as validity and reliability. For example, if a test intends to discriminate among examinees over a wide range of ability, it needs to be composed of items of medium difficulty. On the other hand, if a test aims to identify areas of specific weaknesses for low-ability students, it needs to include a substantial number of items which are relatively easy for the students as a whole (Crocker & Algina, 1986). As it is understood, through the intentions of measurement, tests to be used are differing in terms of ability levels. Therefore, it is important to know which test is more suitable for the measurement purposes. IRT has an important advantage in terms of item and test information functions which clarify the effectiveness of the test according to ability levels of individuals by taking account the amount of information provided by these functions. Item response theory is an effective way of describing items and tests, selecting test items and comparing tests. Preparing the suitable test design involves the use of item and test information functions. Item information function has an important role in item evaluation and test development. Since a test is a composition of items, the test information at a given ability level is computed by summing the item information at that level. As a result, the amount of information provided by the test will be much higher than the amount of information provided by a single item. Hence, a test estimates the ability more precisely than a single item (Hambleton, Swaminathan, & Rogers, 1991; Baker, 2001). It could be determined at which points on the theta scale the test provides the most information. Moreover, selecting the appropriate model for the related study is crucial in educational and psychological measurement for dealing with measurement errors. Since, it clarifies the relationships among test items and ability scores to achieve the best test design (Hambleton & Jones, 1993). Therefore it is considered that comparison of dichotomous IRT models for different ability

levels in terms of the item and test information functions would yield more information about reliability of measures. For this reason at this study it is aimed to compare dichotomously scored one-parameter, two-parameter, and three-parameter logistic item response theory models in terms of the test information function at the three ability levels as low, middle and high, separately. Therefore, the method of this study is survey research. Data was collected by using the test that aims to measure students' achievement levels on the subject of "educational measurement and evaluation". This test was developed by researcher and administered to the students in the Gazi University at the Faculty of Education at the spring term of 2014-2015 academic year. Obtained data includes 264 participants' responses. Then, this data is simulated in R studio by package of Latent Trait Models under IRT by taking the sample size 1000. Similarly, this simulated data was analyzed in the program of R studio. The analyses were carried out by the R package of Latent Trait Models under IRT. The results show that one and two-parameter logistic models provide the highest information at the middle ability level, and the lowest information at the high ability level. Moreover, three-parameter logistic model provides the highest information at the middle ability level although it provides the lowest information at the low ability level. Also, three-parameter model provides the highest information among these models in terms of total information (%95.19), which explains 64.39 percent of total information at the middle ability level. This findings show that guessing parameter is an important factor for this achievement test. Therefore, use of three-parameter logistic model is the most suitable one for this test, and also this test could be used for participants at the middle ability level. For the future researches, it is recommended to compare the dichotomously scored models in terms of ability estimation at different ability levels.

**Keywords:** item response theory, test information function, item information function, R studio.

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## **Opinions Regarding Model Using E-Portfolio in Transition from Primary to Secondary Education**

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Many different systems were tried in transition from primary to secondary education; now TEOG is used for transition. However, as the systems created are mostly curriculum-based, they do not serve to determine whether the higher order cognitive skills aimed in the programs are gained by the students or not. Various system models enabling to measure the higher order skills have been studied and suggestions have been made. The studies in this area only offer a model; but opinions regarding such systems are not sought from the teachers and school managers within the system. However, it is the teachers and the managers working in the field to make the best and the most accurate estimation regarding the impacts of the systems to be created using the models suggested. This study is aimed at inquiring into the possible impacts of the use of e-portfolio in addition to the central exam system in place in transition from primary to secondary education. For this purpose, the researchers have sought the opinions of the teachers and school managers with regards to the model assuming the use of e-portfolio in addition to the exam system. Moreover, opinions regarding the impacts of the model have been diversified through the opinions of the academicians working in the field of measurement and assessment.

The type of this study is a case study, a qualitative research method. In the research, a possible system for transition to secondary education in future was taken as a case, and opinions were sought from different groups (teachers, managers, academicians) on the outcomes of such a case and an attempt was made for an in-depth analysis. The study group for this research consists of 5 academic members working in three different universities in the city of Ankara and 15 primary school teachers and 2 school managers. When setting up the study group, the participants were told about the purpose of the study in details and principle of volunteering was adopted. When choosing the academicians and the managers in the study group, criterion sampling, a purposive sampling method, was employed. The criterion for choosing the academicians and the managers was that they worked in the field of e-portfolio and that they were acquainted with the central exam system. When choosing the teachers, maximum variation sampling method, another purposive sampling method, was employed in

order to be able to reflect the condition in different socioeconomic environments. The teachers were chosen from a school in a rural area and a school with a central location and a private school so that they could represent different socioeconomic environments.

In the process of gathering data for this study, semi-structured interview method was employed. The “participant interview form”, which was developed by the researchers and which was created in parallel with specialist opinion from an academic member working in the field of Measurement and Assessment in Education, was used as a tool for gathering data. Questions in the form were asked to all the participants and questions other than those in the form were also asked in cases where it was considered possible to obtain additional information. The interviews with the academic members took place at the universities, where they worked; and the interviews with the teachers and the school managers took place at the schools, where they worked, as focus group interview. During the interviews, sound recording took place upon the permissions of the participants.

Content analysis is employed to analyze the data obtained from the study. Data is examined using categorical data analysis, the type of content analysis to best suit the questions in the study. The following steps were taken for analyzing the data:

- The records kept during the interviews within the scope of the research were deciphered into texts true to the original records.
- Deciphered texts were read many times, determining the units that may be important with respect to the purpose of the study.
- Categories considered important for research were created. Units that may be included in such categories were determined.
- New categories were formed by grouping similar units together.
- Themes were created grouping the similar categories together.
- All data were analyzed using program Nvivo.

Within the scope of this study, Krippendorff’s alpha coefficient was calculated through coding based on an interview with a participant in order to constitute evidence of persuasiveness. Alpha coefficient was calculated in pairs for three researchers and the lowest was found to be 0.90.

As a result, it was found that transition to e-portfolio system would make learning permanent for the students and would reduce their exam anxiety. In addition, it was also found that it would contribute to the predictive aspect of the exam. It is commonly expressed that a system of transition involving e-portfolio would not be objective due to technological infrastructure needed for the private dschools and schools in rural-urban areas. It is found that the teachers pointed out similar matters during interviews with teachers working at different schools. The school managers and academicians found use of e-portfolio in addition to the central exam system in transition system more viable, while the teachers were more hesitant especially due to the existing conditions. In addition, it was found that the academic members, managers and teachers were highly anxious due to possible problems in assessing e-portfolios. As a result of this study, the researchers are recommended to work on the duties and tasks expected to be included in the e-portfolios of the students if a transition system as mentioned is to be created. Moreover, a study is recommended to address the ambiguities relating to the process of assessing e-portfolios, which turns out to be most underlined issue in this study.

**Keywords:** E-portfolio, Transition system model, Central exam system

# **A Pathway To Educational Accountability: The Relationship Between Effective School Characteristics And Student Achievement**

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School is the leading place which formal and continuous educational facilities are implemented in. The main responsibility of schools is to educate individuals who fulfil expectations from society and the requirements of 21st century. Since schools left behind to meet these high expectancies, many countries have been attempting to change this undesirable situation. (Edmonds, 1979; Sammons, Hillman and Mortimore, 1995; Heneveld and Craig, 1996; Scheerens, 2005; Bergeson and Davidson, 2007; Lezotto and Snyder, 2011). These efforts have brought “educational accountability” as a crucial concept in educational systems. Educational accountability has strong connections with effective school. Effective school is described by Edmonds (1979) as the place to acquire basic skills for academically powerful and weak students. In literature, many effective school characteristics have been illustrated. The most common features for effective schools are Secure and Regular Environment, Teaching Leadership, High Academic Expectations, Monitoring School Learnings, Positive School-Home Relationship, Learning Opportunities offered to all students. (Levine and Lezotte, 1990; Witzers and Bosker, 1997, cited in: Center for Effective Schools [CCE] 2001). The aim of this study is to determine perceptions of secondary school students towards effectiveness of their school in terms of effective school characteristics and also, to estimate the degree of prediction of these effective school characteristics in student achievement (in terms of GPA).

## **Method**

### **Research Design**

This study is correlational (descriptive) research. In this research, the relationships between effective school variables and student achievement were investigated.

### **Participants**

The study group was comprised of 4300 students attending the grades from 5 to 8 in 13 secondary schools in Trabzon. They involved in this study voluntarily.

### **Instrument and Data Analysis**

For research objectives, a measure of school effectiveness was needed. For this, the scale for effective school-SFES- is developed by Günal (2014) which is a five dimensional with Likert type rating scale. In this research, the data on perceptions toward school effectiveness were collected by SFES. The validity evidences were obtained from data by Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) methods. The CFA yielded good fit

indices (RMSEA<sub>(0,042)</sub>) *GFI*<sub>(0,92)</sub> and *AGFI* <sub>(0,90)</sub>. These results supported the construct validity of SFES. As an evidence of internal reliability of the SFES, Cronbach's alpha coefficient for total scale was computed as 0.91. First of all, descriptive statistics were computed for each subscale of SFES to determine the level of importance of effective school dimensions from the students' points of view. After that, collected data were analyzed by multivariate regression analysis method (MVRAM) in accordance with research purpose.

### **Findings**

According to results of the descriptive statistics, the importance levels of effective school dimensions from the students' point of view were found respectively as "Teaching Leadership, Positive School-Parent Relationship, Secure and Regular Environment, Learning Opportunities offered to all students in school, Monitoring School Learnings and High Academic Expectations.

Also, the MVRA gave meaningful results; total SFES scores were accounted for 27 % of variation ( $R^2$ : 0.268  $p < .05$ ) in students' GPAs. According to standardized  $\beta$  (beta) coefficients in the regression equation, the five dimensions of effective schools could predict students' achievements significantly, which were Secure and Regular Environment, High Academic Expectations, Positive School-Parent Relationship, Teaching Leadership, and Learning Opportunities offered to all students in school, respectively.

### **Conclusions and Suggestions**

The study yielded similar results to other studies in the literature. According to the literature, there is strong relationship between students' achievement and key characteristics of effective schools such as high academic expectations, monitoring school learnings, secure and regular school environment and teaching leadership (Reynolds, Bollen, Creemers, Hopkins, Stoll & Lagerweij, 1996; Wilsen, Abbott, Joireman & Stroh, 2002). "High Academic Expectations" was found to be the most effective schooling factor on students' academic achievement. Teachers, school principals and parents' high academic expectations and their expressing such expectations might be influential on students' positive self perception and self-confidence. Therefore, it could be useful that guidance service of schools might give seminars on learners' psychology, positive personality development, self-confidence and self-efficacy for school principals, teachers and parents.

**Keywords:** Effective school, educational accountability, student achievement

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**THEME 10 :**  
**Trends, Challenges and Innovations in Subject Teaching**

# The Role of Cognitive Conflicts in Teaching Second Order Equations

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Due to the limited explanation and research about its occurrence and impacts, cognitive conflict is a phenomenon which is rarely employed in practice. However it has long been accepted as a factor that could enhance learning (Hewson & A'beckett Hewson, 1984). Even if it does not always produce cognitive change, conflict production and resolution processes are sufficient to facilitate understanding (Murray, 1983). There are different uses of cognitive conflict in instructional design (Nussbaum and Novick, 1982; Tirosh & Graeber, 1990; Tirosh, Stavy & Cohen, 1998; Watson, 2003). Generally cognitive conflict is created by an "exposing event" which students must evaluate by using their conceptions. In this study the researchers benefited from the instructional design proposed by Nussbaum and Novick (1982) and considered the conceptual change model developed by Posner, et al. (1982) and Hewson (1981).

The study focuses on pre-service teachers' understanding of second order equations and the effect of employing cognitive conflicts in practice on pre-service teachers' understanding and performance of solving these equations. It aims to determine the role of conceptual conflict in teaching second order equations. Although there are many researches about algebra teaching that has documented learning difficulties and misconceptions, there are few studies about coping with these difficulties or the resolution of misconceptions in the literature. The study contributes the literature by offering new insights on the role of cognitive conflict and algebra teaching. Our specific research questions were the following:

1. What are pre-service elementary math teachers' misconceptions about second order equations?
2. What is the effect of employing cognitive conflict to pre-service elementary math teachers' success?

This study is a mixed-methods design conducted in an elementary education department of an university in the inner part of Turkey. The embedded design was used in which the experimental design was supplemented with qualitative research. Academic performance, open-ended questionnaire data, interview and observational data were collected from the pre-service mathematics teachers who were enrolled in General Mathematics course which is conducted during spring 2014 and 2015. The quantitative part of the study was a one-group experimental design with pre- and post-test measurements, while the qualitative part is based on the principles of case study research. Parallel algebra achievement tests about second order equations and open-ended cognitive conflict questionnaires, whole-class discussions and individual interviews were used as data gathering tools. The qualitative data was thematically analyzed and the researchers made the triangulation of data.

The researchers attempted to produce cognitive conflicts in the classroom by presenting an open-ended questionnaire including different and opposite student views. These student views, including conflicting opinions, were obtained from the literature and the pre-service teachers' wrong answers to the questions in the pre-test. To produce cognitive conflicts, 7 students' views about second order equations were introduced to 35 pre-service mathematics teachers a week after the pretest and they asked to evaluate the students' conflicting views in the questionnaire. Then, a whole class discussion occurred about the cognitive conflicts and they attempted to conclude a shared meaning at the end of the discussion (resolution phase in the cognitive theory). 20 of 35 participants attended pretest and posttest voluntarily. Thus, the experimental design was conducted with 20 participants.

The researchers found a significant difference between the means of pretest and posttest. The result of paired t-test showed that using cognitive conflicts in practice raise the academic achievement ( $t=18$ ,  $df = 19$ ,  $p < .01$ ).

The results of the thematic analysis also support this improvement. The researchers also identified meaningful decreases in the frequency of students' misconceptions elicited from pre- and post-test. The failure to check the zero solution of an equation and accepting false root as a solution was the common errors of pre-service mathematics teachers. The researchers also encountered misconceptions about pre-service teachers' understanding of variables.

### **Keywords**

Cognitive Conflict, Second Order Equations, Misconceptions.

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## **Term Formation, Definition and Teaching Problems of Figures of Speech (Metaphor, Simile, Metonym)**

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Comprehension and narration skills, the two channels of language usage, are the determinants of communication success. Even though the use of a grammatically appropriate and solid language is the first condition of an effective communication, still it is not enough. The multi-dimensional and creative use of the language is equally important too. The main purpose of language teaching is to develop the comprehension (reading, listening) and narration (speaking, writing) skills of the students, to give them multi-dimensional thinking habits and to have them acquire human specific sensitivities (Sever 2010, Kuzu, 2008).

Literature is the field where language is used most efficiently and creatively. People of letters develop a separate world of meanings by processing and transforming the existing language. In order to be able to get involved, to be included and to contribute to this new world of meanings it is a necessity to know the structures named as speech art in the traditional education and as figures of speech in the contemporary literary literature (Benzer 2009, Bisignani 2010, Kövecses 2010).

In literary texts the language is used with its poetic function to create images with the use of metaphors, similes, metonymies, etc. known as figures of speech in traditional education (Jakobson 1960, Kıran ve Kıran 2007). The use of the language within this aspect and therefore teaching it correspondingly is significant. The figures of speech have a key position in language teaching and play an important role with respect to the acquisition of creative language and creative thinking skills by the students (Lakoff and Johnson 2005, Kövecses 2002). However, it is observed that these aforementioned terms are often confused with each other, that there is no agreement in their naming and their definitions; thus obstructing and complicating their teaching and learning processes (Aksan 2005, Uğur 2007, Benzer 2009, Fass 1988, Özünlü 2001, TDK Sözlük 1980).

The aim of this study is to present the current situation that exists in the related literature and Turkish language education environments with respect to term formation, definition and teaching of the concepts of metaphor, metonymy and simile in terms of semantics; in other words, to put forward the dimensions of the assumed problem.

The data of this study were collected by using qualitative approaches and document analysis, which depends on descriptive analysis. Moreover, as a qualitative research method and in order to contribute to the data source of the research, teacher opinions on the subject were collected by means of semi-structured interviews.

As a result of the analysis it is seen that one of the major reasons of the term confusion is the jointly use of the foreign terms and grammatical terms together with the oriental terms that exist in our classic language and literature (Akşehirli 2005, Benzer 2009, Özünlü 2001). Another reason are the different comments of the authors. In order to obtain findings related to the teaching of speech figures, the tasks in the currently used textbooks were investigated. It has been observed that for the artistic language education, which is apart from the education of the basic meanings of the words, is mostly based on the teaching of idioms and proverbs.

Moreover, it has come out that the figures of speech, especially in poem analysis tasks, are analyzed in order to reach the meaning of the text but no theories or methods related to the development of these figures of speech are covered or given in the textbooks (Güzel 2015). Whereas it is a necessity to include activities that would allow the students to analyze and produce the figures of speech that they are aware of only conceptually, in a way that would develop their creative thinking (Greves 2005, Oral 2008).

It is our belief that this study will contribute to the research domain by putting forward the existing situation and arrangements, together with the approaches and methodologies used for teaching the figures of speech, as these are given in the used academic publications and Turkish textbooks.

### **Keywords:**

Turkish language teaching, creative thinking, figures of speech

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# **Extensive Reading in Foreign Language Vocabulary Learning: A Longitudinal Study**

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Vocabulary learning has always been one of the main challenges for language learners as certain extent of word knowledge is required for oral and written communication as well as for listening and reading comprehension. It is possible to improve vocabulary knowledge with a variety of intensive vocabulary learning techniques (such as keeping vocabulary journals, putting sticky words on walls, writing synonyms/antonyms). However, meaningful vocabulary learning is only possible through vocabulary learning in context. In context, learners are exposed to loads of different forms and usage of vocabulary, so they learn more at once, which is tied with their previous learning and in the end as a result, the learners will be able to retain recently acquired vocabulary in their memories more permanently than any other ways of vocabulary learning. The best resource for meaningful vocabulary learning is mostly possible through extensive reading which is quite popular as an extra-curricular activity in language learning.

Although there have been many studies on learning vocabulary through reading (Rott 1999, Dupuy and Krashen 1993, Hulstijn 1992, Day et al. 1991, Pits et al. 1989), the number of the studies on vocabulary learning through reading extensively is relatively few when compared to the former. Among experimental and case studies of extensive reading in language learning, Horst's (2005) study, in which on average 10.75 books were chosen to be read in 6 weeks by each 23 adult English as second language learner, supports the claim that extensive reading leads to substantial vocabulary gain. With this study, it was showed that the vocabulary gains through extensive reading is rather high both statistically significantly and in size/number in contrast to earlier reading studies by Pitts et al. (1989) (statistically significant but small gains), Horst et al. (1998) (4.62 average word growth in multiple choice test, 1.28 in word association test), Shin (2006) (only 9% gain in 40 unknown words at all).

Following the principles of extensive reading by Day and Bamford (1998) and the recommendation of Nation (2001) that reading a graded reader a week regularly in long run improves vocabulary knowledge significantly, we carried out a longitudinal study in order to investigate the effects of extensive reading as a factor on foreign language vocabulary development. 60 intermediate level prep class students in a Turkish state university participated in the study. 30 students belonged to the experimental group and the rest belonged to the control group. Both groups attended to traditional language classes; but, as an extra-curricular activity the experimental group was involved in an extensive reading program. Every week for ten weeks, they were required to read one of the level 3 graded readers (from Oxford Bookworms Library) –which were highly rated by the students in experimental group at the beginning of the treatment- whereas the other group took only

reading and writing classes covered in curriculum and didn't follow any pleasure reading program out-of-class.

The study examines the relation between reading extensively and the progress in three different aspects of vocabulary knowledge: size, depth, word recognition speed and accuracy of the experimental group by comparing with the control group. Accordingly, each being a custom-made test, a Yes-No Test in order to measure students' vocabulary knowledge, a Depth Test based on the model of 'Word Associate Test' (Read, 1998) for the knowledge to associate the target word with its semantic relations and a Recognition Speed Test for their speed of word recognition were taken by both groups at the beginning and end of the treatment. The words for the tests were picked from the level 3 wordlist which was obtained by sorting out the other words of level 1-2-4-5 and 6 in the general Oxford University Press wordlist.

The results of the three tests revealed that the students who did extensive reading as an extra-curricular activity scored significantly higher than those who didn't. With regard to the results of three tests, learners improved vocabulary size most (57%), then word recognition speed (54%) and vocabulary depth knowledge (46%). With an average of 51% progress in all three aspects of vocabulary knowledge, the present study shows that extensive reading has a relatively positive effect on the vocabulary development of the EFL students.

**Keywords:** vocabulary, extensive reading, foreign language

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# Responsible Research and Innovation: What is it? How to Engage in Science Education

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Science and technology are powerful tools to shape the future and change the society. Science education has an important role to educate the future scientists. What scientists do, how they work, how they innovate and how they make decisions are important subjects to teach science in the current society. While science and technology develop and new products or/and processes being innovated, science education needs to renew itself and work along with the developments in science and technology. There is a new policy emerged in European Union (EU)'s policy discourse and in funding scheme which is called Responsible Research and Innovation (RRI). The emerging of RRI goes back to beginning of 2000's. Owen, Macnaghten and Stilgoe (2012) mention that "responsible innovation" and "responsible research and innovation" has been used for a decade. In the last period (last 4 years) there is a growing interest in Responsible Research and Innovation and related researches and projects. The funds of European Union which are given especially for the projects about RRI has an important role in this.

## Purpose

Although there is a growing interest in RRI and RRI in science education, RRI needs to be discussed more to reach a better understanding. Moreover more studies and evidences are needed to realize the positive effects of RRI in science education. Therefore, the main goal of this study is to discuss what RRI is, how it developed, how it works and how it can be engaged in science education. In this regard, the answers for the following questions were searched:

1. What is RRI?
2. How RRI works?
3. What is the role of RRI in science education?
4. What are the findings of previous studies related to RRI in science education?
5. How can we engage RRI in science education?

## Methodology

Since the goal of this study requires an overview of what has been discussed in the literature about RRI it requires a literature review. Webster and Watson (2002) point out that an effective literature review give us an overview of the areas where a large number of researches has been done and the areas where more researches are needed. Furthermore Van der Sanden and Meijman (2004) call attention to the value of the literature which are reviewed.

In order to reach the aims of this study and provide a valuable review for the readers, it was chosen to use the systematic literature review and to follow the model of Van der Sanden & Meijman (2004). Furthermore this study analyses the full-text articles, books and reports about RRI. Since the documents and articles about RRI belong to last decade, relatively new,

it is not planned to set a year period in order to choose the recent documents for analyzing. In order to operate a systematic analysis the concept matrix and tabulation techniques were used.

### **Findings**

The most widely used and in the literature the most cited definition of RRI is made by Von Schomberg (2013) where he defines RRI as "...a strategy of stakeholders to become mutual responsive to each other and anticipate research and innovation outcomes underpinning the "grand challenges" of our time for which they share responsibility." RRI has an anticipatory approach in order to predict the possible results (Eden, Jirotko& Stahl, 2013). Because RRI aims to ensure the acceptable and desired outcomes of research and innovation (Stahl, 2013).

Owen et al (2012) defined "three emerging features of RRI" at policy level of EU: Science for society (focuses on the purposes and right impacts of research and innovation), Science with society" (need for institutionalized responsiveness) and reframing responsibility (responsibility in the context of innovation).

On the other hand, the European Commission (EC) defines six keys for RRI:

- Engagement of all societal actors
- Gender Equality
- Science Education
- Ethics
- Open Access
- Governance

It is mentioned that there is a growing visibility of the concept of RRI on EC policy context. Owen et. al (2012) mention that there is a growing interest in RRI especially in the last period. For example, there was (dated to 2012) seven international workshops about RRI. Moreover, within Horizon 2020 programme the projects about RRI are financed under Science in Society Programme.

Although science education is one of the key areas of RRI, there are not enough studies and publications in educational context. It was found that most of the studies about RRI are in technology and research areas. However there are various projects which serve some useful tools and implementation ideas for RRI in science education. It is also found that in the studies and projects about RRI in science education, there are some links made with nature of science (NOS), science and society concepts.

### **Conclusions and Suggestions**

RRI is a new issue where more findings are needed. In the last few years there are small number of projects and researches has been started but they provide limited knowledge about engaging RRI in science education. Although the conceptualization and implementation of RRI presents some challenges, it also offers many opportunities for the science education area. There are more researches, publications and more findings are needed to have better understanding of RRI and to discuss its' engagement in multi disciplines.

**Keywords:** Responsible Research and Innovation (RRI), science education, literature review

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## Ecological Problems in the Teaching of Perspective Drawings at 8th Grade

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The study analyzes perspective drawings taught at 8th grade classrooms in terms of ecological problems and investigates how this subject is perceived by teachers and how this situation is reflected in education. In this qualitative study, clinical interviews with 10 teachers were conducted in order to analyze the ecological conditions and teaching tools offered to students and how teachers perceived and used those ecological conditions and teaching tools.

Perspective drawings are drawing techniques enabling the transfer of objects on paper plane while maintaining their three dimensional views (Özkan, 1996). They are divided into two groups as parallel perspective and conical perspective according to the projection method used (Özkan, 1996; MEGEP 2007). Whereas it is possible to see the actual size of objects in parallel perspective, geometric features of the objects are not protected in conical perspectives (Snow & McLaughlin, 2005). Even though both types of perspectives are encountered in the drawings used in mathematics curriculum, only conical perspective is included in the program's objectives. Only one point perspective and two point perspective are included in the 8th and 12th grades among one point, two point and three point perspectives.

In the study, topics supporting the concept of perspective in mathematical sense and topics supported by this concept were examined primarily when ecological analysis of perspective drawings was being performed. Point, line, line segment, projection, parallelism, intersection, space, surface, plane, three dimension, two dimension, horizontal line, geometric solids, angles, slope and vector have been identified as the most important concepts related to perspective. Objectives, which are related to perspective in the curriculum, were analyzed when ecological analysis of curriculum was being performed. It was determined that 4th-7th grade objectives regarding the creation of drawings with 3D cube arrays on isometric paper, the drawing of structures formed of co-cubes on isometric paper, the drawing of different views of structures formed of co-cubes and the creation of structures, whose drawings from different directions were given, with co-cubes and objective regarding the isometric and orthographic drawing of structures formed of unit cubs at 9<sup>th</sup> grade are objectives associated with perspective (MEB, 2013). It was also determined that these objectives at 4th- 9th grades were based on parallel perspective whereas objectives "Makes the perspective drawing of the view of a cube or a prism from a certain distance" at 8th grade and "Creates and explains one and two point perspective drawing of given structures" at 12th grade regarding the concept of perspective directly are related to conical perspective drawings, mostly used in the field of art. In this context, there is no concept directly supported by perspective in the curriculum and it

could be said that there is no objective directly related to objectives about conic perspective at 8th and 12th grades. In addition, it seems that the concept of perspective is not mentioned in the 4th-7th and 9th grades objectives, which are actually found to be associated with parallel perspective.

Based on the clinical interviews with teachers, it is seen that teachers have difficulty in defining the concept of perspective. While eight teachers defined perspective as “The view of an object from different directions/angles”, three teachers defined it as a distance-proximation relation. Three dimension, line, point and parallelism were respectively leading concepts supporting the perspective and three dimension was the first concept associated with concepts supported by perspective according to teachers. None of the teachers mentioned about parallel perspective while seven of them mentioned about two and one point perspectives and one teacher mentioned two point perspective. In addition, two teachers did not express any opinions about perspective types. Whereas some teachers ascribed the reason of perspective’s inclusion to the curriculum to its relation with the three dimensional perception and visual spatial intelligence, other teachers ascribed it to its also being a subject of art class and its usefulness towards choice of profession. When they were asked about the reason why the related objective was in 8th grade curriculum, two teachers expressed no idea while three teachers stated that objective was not necessary. Two teachers found it to be related to art class whereas two of them criticized it for being limited to just cubes and prisms. Four of the teachers defended that it was an independent subject and it had no connection with other subjects while others saw the subject relevant to geometric solids, coordinate system and surface development. Teachers stated that they gave examples about the subject generally with the help of objects in the classroom and they had difficulty while drawing. All teachers having difficulty in teaching the subject stated that students had too much difficulty in drawing. Students’ being unable to associate perspective drawing taught in art classes with mathematics and insufficiency of time while teaching were some of the most common situations voiced by teachers. When teachers were told that this subject would not be in the new curriculum, nine of them defended that the subject was not necessary.

Results yielded that only conical perspective is included just as a drawing technique in teaching of mathematics and there is no concept directly supported by perspective. Interviews showed that teachers have difficulty in understanding, correlating and teaching this subject. These findings show that teaching perspective drawings is hard and challenging as in the curriculum. Unless a better environment is allocated to perspective drawings ecologically, it is more accurate if it is not included in the curriculum.

**Keywords:** perspective, ecological analysis, mathematics curriculum, teacher opinions, 8th-grade.

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# Relationships among Elementary Students' Metacognitive Skills and Motivation toward Science Learning

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The most important feature of a successful education includes students' awareness about the ways through which students learn, remember, think and motivate themselves (Weinstein & Mayer, 1983). The types of individuals that our society need today are composed of conscious persons who can control their own learning process and experiences. For this purpose, a constructivist approach to education has been adopted as the base for our education system. The goals of "constructivist education system" are to raise people who are capable of generating new information from old information and aware of their own learning methods, and lastly who know the value of knowledge and use it accordingly (Erdem & Demirel, 2002). The learners can organize and keep control of their learnings in an effective way when these experiences are built by persons that can control what they have learned and are aware of their own cognitive processes (Doğan, 2013). That learners are aware of their cognitive processes and can increase their success by acting systematically in this process has increased the number of studies on "metacognition" in recent years. There are many studies in western countries which were carried out to examine the relationship between metacognitive knowledge, its regulations and demographic characteristics, cognitive skills (Veenman & Spaans, 2005). It was seen that the studies generally gave more emphasis to cognitive domain and less emphasis to affective domain (Yaman & Dede, 2007). Some studies show that the girls' motivation toward science learning was higher than boys' and students' who have higher level motivation have got higher science academic achievement. As grade level increases, motivation toward science learning decreases (İnel- Ekici, Kaya & Mutlu, 2014). The purpose of this study is to examine students' metacognitive skills and their motivation for learning science. The other purpose is to investigate the relationship between metacognitive skills and their motivation for learning science. Besides, the study aims at analyzing students' metacognitive skills and their motivation for learning science in terms of their gender, grade level and academic achievement in science lesson.

## Method

This study is one of quantitative research designs, correlational study along with "purposeful sampling method". A total of 302 students from 5<sup>th</sup> and 8<sup>th</sup> grades in 5 schools in Kale, a district of Denizli, were included in the sample. 167 students from 5<sup>th</sup> grades and 135 students from 8<sup>th</sup> grades participated in the study voluntarily. The reasons to include only 5<sup>th</sup> and 8<sup>th</sup> grade students in the sample are that they represent the first and last grades of the secondary school in Turkish 4+4+4 mandatory education system. Developed by Sperling et al. (2002) to determine students' metacognition and then adapted into Turkish by Topçu and Yılmaz-Tüzün (2007), Junior Metacognition Awareness Inventory was used in this study. This scale was used to measure both dimensions of knowledge of cognition and regulation of cognition. Students' Motivation Toward Science Learning, developed by Tuan, Chin and

Shieh (2005) and adapted into Turkish by Yılmaz and Huyugüzel-Çavaş (2007) was used to determine students' motivation towards science learning. The dimensions of the scale include: self-efficacy, active learning strategies, learning environment stimulation, performance goal, achievement goal and science learning value. Each dimension's reliability coefficient alpha ( $\alpha$ ) changes between .5 and .8. The data were collected in the first semester of 2014-2015 academic year. The instrument application and data collection was done by researchers and teachers in the schools. Students were informed about the purpose of the study before the distribution of instrument. Students were told not to write their names on the survey forms and their oral consent was taken.

### **Findings and Conclusions**

There is a negative correlation between metacognitive skills and their motivation for learning science. Multiple linear regressions were conducted to predict metacognitive awareness in terms of motivation to learning science dimensions. The result of the present study revealed that boys' motivation level was higher than girls'. There is no significant difference between motivation levels and both grade level and gender. However, there is a significant difference between motivation levels and science achievement. There is no significant difference between metacognitive skills and both grade level and gender. On the other hand, there is a significant difference between metacognitive skills and science achievement. Students' academic achievement could be developed by increasing students' metacognitive skills and motivation. Teaching methods should be designed for promoting students' metacognition, motivation and academic achievement.

**Keywords:** Metacognition, motivation, academic achievement in science lesson, gender, grade level.

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## **A Study about the Effect of Science Fairs on Nature of Science and Scientist**

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By the way of knowing the development and changes of science from past to future, the life histories of scientists, their working conditions and their professional developments, it is possible for students to change their perspectives and to realize their self efficacy. Among one of the aim of primary schools science lectures teaching program is to help students to be scientifically literate and to gain scientific process skills. By this way the number of individuals to think, explore, asking questions and having problem solving abilities will increase. Therefore, it is important to understand and assess the nature of science and perceptions of scientists. Science fairs give oppurtunities for students to develop positive attitudes toward science and to put themselves into place of scientists. The studies conducted so far demonstrated that the perceptions of secondary school students are not sufficient enough. Therefore in this study, the purpose is to understand the perceptions of students about nature of science and to compare their perceptions before and after organizing science fairs. The science fair includes students' scientific projects and supported by TUBİTAK. The details about the students' projects were included in the study. In this study, mixed data collection methods including qualitative and quantitative research methods were used. The sample of the study constitue 140 students at grades 5, 6, 7, and 8 in Yenice Secondary School in Haymana district in Ankara. For qualitative research methods, interviews, observation and document analysis were used together and the results were reported by the way of triangulation comparing the results obtained from each data collection instruments. Before conducting interviews, interview form was prepared with an expert and it is constructed with warm-up question, alternative questions and probes to get detailed answers from the students. Interviews were made with 10 students. Furthermore, for quantitative part of the study, DAST test which was developed by Chambers(1983) and Scientists Evaluation Form which was developed by Nuhoğlu and Afacan (2001) was applied on 140 students. Furthermore, for quantitative part, achievement and attitude scales were applied on students before and after science fair. All of data collection instruments were applied by the researcher herself. Data obtained from the study were analyzed by both descriptive and content analysis. Reliability and validity of the study were also taken into consideration. For example, for qualitative part, inter rater reliability coefficient was calculated in order for reliability between different coders. At the end of the study, it is seen that before their participation to science fair, students thought that scientists are usually people doing experiments, dealing with science and trying to be useful for human beings. Also it is established that students were aware of the knowledge to be changed without any possibility for them to be scientists. Additionally because the region that this study was conducted is in a rural area, it is observed that students did not know any scientists other than the content of science lesoon. After science fair, it is determined that there are positive changes in perceptions of students about nature of science and about their perceptions of scientists. Suggestions were made about the importance of science fair. It is demonstrated that to organize science fairs in schools and to give responsibilities to students and to make them active participants during the preparation of

organization of the science fair. At the end of the study, many suggestions were made to gain students desired features.

**Keywords:** science, nature of science, scientist, science fair

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## Development of the Multimedia Material Design Portal for Teaching Turkish as a Foreign Language

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### Purpose

Turkey has attached a lot of importance to teaching English as a foreign language in line with global developments. However, it is questionable how much importance is attached to teaching Turkish as a foreign language (TTFL). Many researchers argue that there is not sufficient research in this field (König, 2002; Özyürek, 2009; Karababa, 2010; Göçer & Moğul, 2011). The current research, on the other hand, indicates that problems in the TTFL are experienced especially in material development (Yağmur, 2006; Açıık, 2008; Erdem, 2009; Göçer & Moğul, 2011).

Recently multimedia material design has come up as a valuable concept for language education. Multimedia is defined as “the exciting combination of computer hardware and software that allows you to integrate video, animation, audio, graphics, and test resources to develop effective presentations on an affordable desktop computer” (Fenrich, 1997). Multimedia environments can make the content more accessible (Kruse, 2004), promote active learning through geographical freedom (Cheong, 2002), and maintain learner attention, provide immediate feedback and foster teacher-learner and learner-learner interaction (Cantoni et al., 2004). While language education is one of the areas where technology and the Internet is widely utilized, the number of multimedia environments that are developed for the TTFL is strikingly low (Akalm, 2005; Durak, 2006; Açıık, 2008).

Against this background, it can be argued that material development is a crucial issue that should be considered in terms of the TTFL. Especially, lack of platforms that can promote learning Turkish abroad adversely affects teaching and spread of Turkish as a foreign language. In this respect, this research attempts to develop the TTFL multimedia material design portal that will serve TTFL teachers and learners, and that will provide the opportunity of designing sample multimedia material development environments for the effective use of multimedia materials.

### **Research Design, Data Collection and Data Analysis**

The ADDIE (Analysis, Design, Development, Implementation and Evaluation) model was employed to develop the multimedia material design portal. This paper includes the data obtained as a result of the analysis, design and development phases of the ADDIE model.

In the analysis phase, a need analysis was conducted through the “Digital Material Design Process Form” composed of eight themes to collect data related to the materials developed by teachers:

1. Subject matter
2. Level
3. Outcome
4. Reasons for preference in terms of learners
5. Reasons for preference in terms hardware and software
6. Other reasons for preference
7. Material characteristic
8. When and how to be used in classes

The form was developed by the researchers and administered to 34 language teachers (Turkish, English, French, Russian, Arabic and Japanese) attending a teacher education certificate program at Ankara University in academic year 2013-2014. The participants were asked to develop digital materials through various digital material development platforms and these materials were analyzed through the examination of the form and the platforms used. As a result of the analysis, the materials teachers preferred and the reasons for their preferences were determined, the platforms used to develop materials were examined, and the mock-up studies were built on these findings.

The most preferred digital materials were determined based on the frequency analysis. The modules to be included in the portal were determined based on the participants’ preferences and the expert opinions as follows:

- Quiz
- Digital poster
- Flashcard
- Puzzle
- Matching
- E-portfolio

The design phase includes the mock-up studies based on teacher characteristics; the design of digital material development environments; and the preparation of the content for sample materials. The content for sample materials was prepared for each module and each proficiency level based on the A1-C2 levels of the Common European Framework of References for Languages.

Before the mock-up study, the material development environments preferred by the participants were examined in detail and based on the common characteristics of these environments a tentative system was developed. Some visuals of this system are presented below.

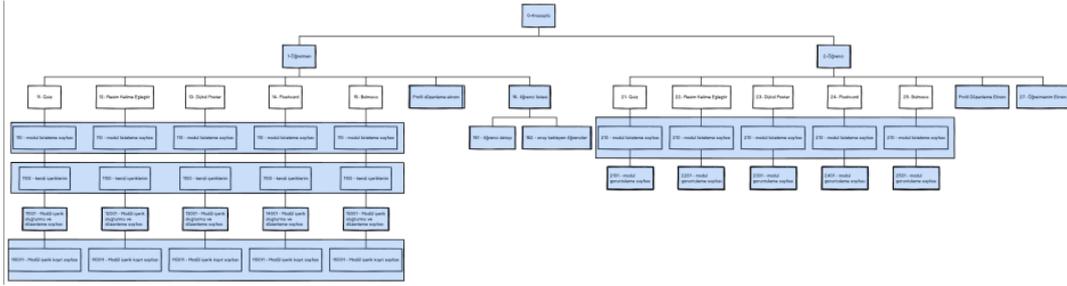


Figure 1: General System Modules

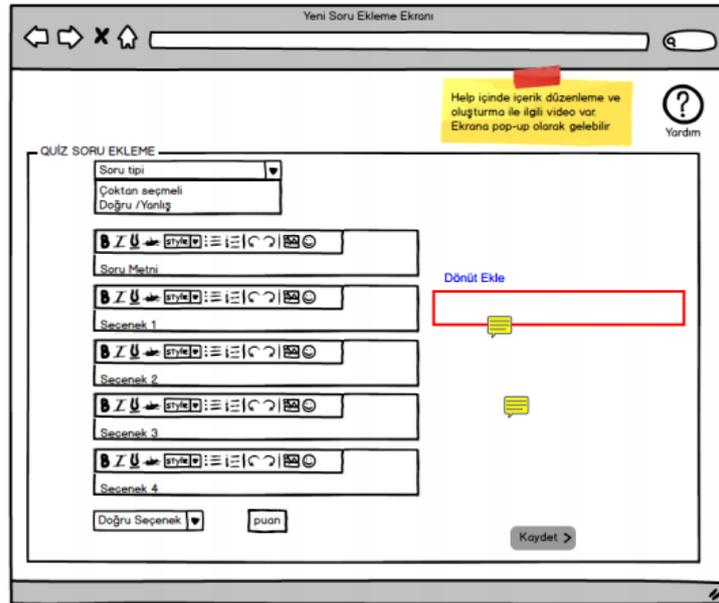


Figure 2: Mock-Up of the Quiz Module

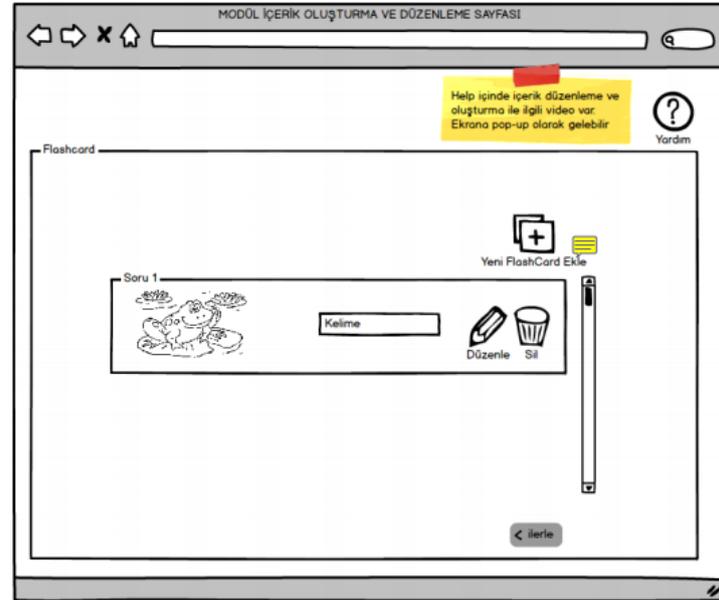


Figure 3: Mock-Up of the Matching Module

At the end of the design phase, the portal design was reviewed and completed by the researchers and a teacher teaching Turkish as a foreign language. 45 modules and their relations were identified. In addition, the characteristics of metadata labels were determined based on the data received from the participants and “outcomes”, “skills”, “levels” and “subject” were selected as metadata labels. Following the design phase, the system was developed and completed by the software specialists.

**Keywords:** Foreign Language Education, Multimedia Materials

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## Real and Virtual Fieldtrips in Earth and Environmental Science Teaching

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Fieldwork is widely regarded as an essential part of undergraduate education in earth and environmental sciences, and lecturers generally agree that it represents one of the most effective and enjoyable forms of teaching and learning for both staff and students. Field studies provide the opportunity to experiment with a wide variety of different modes of course delivery and have a valuable role as a vehicle for the integration of many theoretical and practical concepts taught within an earth and environmental science degree. Field experience is also seen as vital for the development of students as qualified practitioners in all aspects of these disciplines since a great deal of research in the subject is fieldwork-based (Çalışkan, 2011; Gürgen & Çalışkan, 2009; A. Kent & Foskett, 2000; M. Kent, Gilbertson, & Hunt, 1997). In recent years, the number of students gradually increased despite the decreasing educational resources per capita in the earth and environmental science departments. However, the costs of fieldworks have also increased. Since the beginning of the 1990s, as an alternative to actual fieldwork, the virtual reality has been regarded as a cheaper way of doing field trips. Virtual field trips basically emulate actual field trips. They have a valuable role in supporting and enhancing real fieldwork, and empowering students who are disadvantaged financially or physically (Gress & Scott, 1996; Hirsch & Lloyd, 2005; Rose, 2003; Spicer & Stratford, 2001; Stainfield, Fisher, Ford, & Solem, 2000).

In this study, in order to determine the attitude of lecturers of the earth and environmental sciences to real and virtual fieldtrips, a structured electronic questionnaire has been used. The validity of the questionnaire has been ensured by gathering expert opinions from three experts through interviews. The questionnaire has been sent to 567 lecturers, but only 132 replies have been received. The study group contains geographers (46%), biologists (25%), geologists (11%), archeologists (5%), town planners (3%) and survey engineers (3%) from 10 different universities in Turkey. 28% of the participants are women and 72% of them are men. There are professors (28%), associated professors (14%), teaching staffs with PhD degree (22%), and research assistants (36%) in the research group.

Most of the participants of the study (91%) are using the fieldtrip as a learning method. The duration of the educational fieldtrips performed by the respondents is 1-2 days for the 18% of them, 3-5 days for 27%, 5-10 days for 23%, and more than 10 days for the remaining 23% per year. While 77% of the respondents are using fieldtrips for an undergraduate course, for the 59% of them fieldtrips are an essential part of graduate courses as well. Most of the scientists (91%) need fieldtrips not only as a teaching method, but also as a research process. The least preferred form of fieldtrips is the residential fieldwork. More than half of the participants (54%) are using virtual fieldtrips for educational purposes. The most preferred form of virtual fieldtrips is using visual images of the real world (photos, maps, videos). The scientists also use satellite images, 3D maps and aerial photos. One of the most preferred methods for the virtual fieldtrip application is mentioned as Google Earth presentations of chosen regions. Only 12 people choose to use web pages which contain virtual fieldtrips. Only a few of the participants (7%) agree with the idea that virtual fieldtrips can be replaced with real fieldtrips. The most effective way of using virtual fieldtrips (85%) is regarded for the usage in the

preparation part of real fieldworks. Virtual fieldtrips are suggested as useless applications by the 7% of respondents.

**Keywords:** Fieldtrips, virtual fieldtrips, education of earth and environmental sciences, computer aided education, information and communication technology.

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# Examining the Motivation towards Recycling as the Predictor of Recycling Behavior

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Industrial revolution led to many changes around the world. The most important of all changes is the one in environment. Unprecedented changes, created by human behaviors, in environment have brought along many issues such as air pollution, water pollution, decrease in biological variety, environmental pollution, overuse of sources, environmental injustice, and population problems (Kump, Kasting & Crane, 2004). Communities and individuals share important responsibilities in solving environmental problems. One of these responsibilities is about exhibiting environmentally-aware behaviors. Some of the environmentally-aware behaviors that individuals can exhibit are saving water, using mass transportation, using renewable energy sources, planting trees, and recycling. Recycling occupies an important space among environmentally-aware behaviors. Recycling is to transform reusable waste material into secondary raw materials and to re-include them in the production process, through some physical and/or chemical processes. Recycling waste products reduces negative effects of waste material on environment, health, and economy and prevents pollution and destruction of natural resources (Spiegelman & Sheehan, 2004). Recycling is one of the most measured dimensions of environmentally-aware behavior because recycling significantly contributes in economy and environment (Iyer & Kashyap, 2007; Valle, Rebelo, Reis, & Menezes, 2005).

It is known that schools play important roles in order for students to be able to perceive recycling. One of the factors affecting students' recycling behavior is their motivation towards recycling. Hence, the purpose of the current research is to define the relationship between high school students' motivation towards recycling and their recycling behaviors. Following questions are asked within this general purpose: is there a significant relationship between high school students' recycling behavior and the sub-dimensions of recycling motivation scale? Does high school students' motivation towards recycling predict their recycling behaviors?

## Method

The research was designed in the survey model and participants were comprised of 120 students who attended a high school in Ankara, Turkey, during 2013 and 2014 academic years. 52% of the participants were female and 48% were males; 32% attended 9<sup>th</sup> grade, 34% were in 10<sup>th</sup> grade, and 34% were 11<sup>th</sup> grade students.

Recycling Motivation Scale and Recycling Behavior Scale were used as data collection tools in the research. Motivation towards Recycling Scale included 18 items and consisted of 3 dimensions such as intrinsic motivation, social value, and environmental value. The options of the 5-point Likert-type scale were "Strongly Disagree", "Disagree", "Neutral", "Agree", and

“Strongly Agree”. KMO value of the scale was defined as .898; Bartlett Sphericity significance level as 0.000; and Cronbach’s Alpha reliability coefficient as .90. Recycling Behavior Scale contains three dimensions as recycling behavior, recycling preference, and recycling interest. Scale KMO value was defined as .855; Bartlett Sphericity significance level as 0.000; and Cronbach’s Alpha reliability coefficient as .90. Items on the Recycling Behavior Scale are 5-point Likert options with “Never”, “Rarely”, “Sometimes”, “Often”, and “Always”.

Data obtained in the research were analyzed with SPSS 18 software package. Each item on Recycling Motivation Scale had points between “1” and “5” for the data analysis. The lowest score on the scale was 18 and the highest was 90. Recycling Behavior Scale had points “1” to “5” for data analysis. The lowest score on the scale was 11 and the highest was 55. In SPSS software package, Pearson correlation test was used to define the relationship between Recycling Motivation Scale intrinsic motivation, social value, and environmental value sub-dimensions and the Recycling Behavior Scale overall and recycling behavior, recycling preference, and recycling interest sub-dimensions. Multiple regression analysis was used to define how Recycling Scale sub-dimensions and the scale overall predicted the recycling behavior.

## **Results**

The current research showed that there were significant relationships between Recycling Motivation Scale intrinsic motivation, social value, and environmental value sub-dimensions and the Recycling Behavior Scale overall and recycling behavior, recycling preference, and recycling interest sub-dimensions. In addition, it was found that overall Recycling Motivation Scale significantly predicted recycling sub-dimension but not recycling interest and recycling preference sub-dimensions. Environmental value sub-dimension was defined as a significant predictor of recycling sub-dimension and intrinsic motivation was a significant predictor of recycling preference sub-dimension.

Based on the study findings, following recommendations are made: it was found that high school students’ motivation towards recycling was a significant predictor of their recycling behavior. Hence, activities prompting students’ motivation towards recycling must be organized at schools.

**Keywords:** Recycling, Motivation, Behavior, High school students

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## Reflection of the Changes in Modern Physics Curriculum On School Textbooks

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Research in the literature (Aycan & Yumuşak, 2002; Örnek, Robinson, ve Haugan, 2008; Ertay, Şen & Eryılmaz, 2009) shows that made it difficult to understand students' physics. Aycan & Yumuşak (2002) in their studies students, most of the subjects had difficulty in secondary thread slight, the oryandatonic theory has determined that the topics. When we take a look at how physics has been taught in the last twenty years, we can spot three main changes in physics curriculums. The 11<sup>th</sup> grade modern physics topics within the program applied between 1992 and 2010 are “theory of light” and “theory of atom”. With the reconstruction of secondary schools in 2005, the educationspan was elongated from 3 to 4 years and the 11<sup>th</sup> grade topics were continued to be taught in 12<sup>th</sup> grade with the same titles. Reconstructional soled to a new curriculum that was put into practise gradually after 2006-2007 educational year. While modern physics topics were given under modern physics unit in 11<sup>th</sup> grade with 2010-11 educational year, they were transferred to 12<sup>th</sup> grade by decreasing the functions with the new curriculum dating from 2013.

School text books are concretes ources introducing the curriculums to teachers and they are expected to cover activities that will lead the students to gain knowledge and skills determined in the curriculum. The purpose of the study is to investigate how changes in modern physics teaching as part of education programs affected the school books. Study group is composed of 20 physics teachers and 7 experts in the field of physics education. Experts and teachers were asked to fill in book evaluation forms (Eryılmaz, 2014) determined to be the data collection tool for the research. The form had two sections; one examining how functions and skills based on them are handled in present program and the other covering 19 statements related to “teaching-learningconditions; content and assessment-evaluation” features of both the old and the present school books. The obtained data have been analysed quantitatively.

It was found as a result of data analysis that teachers and experts didn't regard – the questions testing knowledge functions; and the skills that need to be built on these functions - in sufficient levels. Physics teachers thought the questions testing “skill functions” weren't adequate; experts thought they weren't sufficient albeit there were some. Experts were found to think that, old books didn't have authentic examples; whereas experts and teachers considered the new books to partly have authentic examples. Experts and teachers have been found to think; in both course books modern physics sections were open to misconceptions. Intermis of experts ideas about assessment – evaluation features; old books weren't found more sufficient in terms of number of questions. Teachers indicated, supplementary assessment-evaluation methods were poorly covered in both book show ever; old ones were

mentioned to have assessment-evaluation methods with classifying while new ones, to have evaluation questions based on performance.

Inconsequence it has been found about course books while teaching modern physics that; Authentic contexts are poorly covered, whether the expressions, pictures, figures or diagrams are going to lead to misconceptions or not is not taken into consideration, supplementary assessment-evaluation methods and pre-learnings of students are underestimated. Present course books can be said to have performance-based activities, albeitin sufficient. When the modern physics sections of the course books were examined by the physics teachers and experts, they found the books sufficient in terms of scientific content; yet, insufficient in terms of learning-teaching and evaluation and assessment features. When the suitability of the modern physics sections of the book designed in line with 2011 curriculum to the curriculum was investigated, it was found that the book is adequate in terms of information attainment; yet, insufficient in terms of skill attainment. While preparing books about abstract subjects like modern physics in addition to having true, clear, understandable and up-to-date content, examples from daily life should also be included. It is also recommended that expressions, pictures, figures and diagrams leading to misconceptions not be covered; while examples, activities and questions that will improve students' skills in different areas be included.

**Keywords:**Modern physics, curriculum, textbook, physicsteachers, experts

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## **An Examination of Articles Published in Educational Journals Having Highest Impact factors: Content Analysis**

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There are many reasons why research studies needed to be done. Firstly, research studies are to provide further educational improvement (Mortimore, 2000). Secondly, arrangement of these studies provides opportunity to determine the trends of these studies and to evaluate the results depending on them as well as they make a contribution to field of interest and researchers (Selçuk, Palancı, Kandemir and Dündar, 2014). Today, journals enable to analyze the research studies. They play an important role with regard to developing scientific knowledge. Especially, scientific studies published in the journals are the principal indicators of production and accumulation of high quality knowledge on that specific area. Generally, researchers, who are intend to follow latest studies, hot topics, seeking promotion.... etc, tend to look at journals indexed in Social Science Citation Index (SSCI). Of these journals, the ones having high impact factors increase the probability of getting promotion, funding, obtaining position, and job appointments of the researchers (The PLoS Medicine Editors, 2006). At this point, in this study, research studies published in journals having high impact factor were examined. Therefore, it is aimed to determine the trends of research studies on educational sciences.

In literature, it is seen that research studies (Alper and Gülbahar, 2009; Arık and Türkmen, 2009; Aydın, Erdağ and Sarier, 2010; Kleinsasser, 2014; Selçuk et al., 2014; Yılmaz and Altinkurt, 2012) mainly focused on sub field of educational sciences and examined other research studies. Especially, in Turkey, there are limited research studies examining international journals. Among these journals, there has been no research studies carried out on educational journals having highest impact factor. Therefore, this study attempts to fill this need. To be more precise, the aim of this study is to reveal several characteristics (keywords, number of authors, reasoning types of statement of purpose, the time between submission and admission of papers, descriptive of participants, sample size, types of instruments and analysis, software/package) of papers which published in education journals having the highest impact factor between 2009 and 2013. Moreover, it is expected that results of this study would provide beneficial information to researchers, journal editors and reviewers.

## Method

Content analysis is employed as the research method in this study. The data were gathered from 660 articles published in between 2009 and 2013 years. Criteria for selecting journals were as follows: (i) including "Education" in the title, (ii) full text in English, (iii) highest five-year impact factor, (iv) not being belong to specific area and (v) not including "Review" in the title. According to 2013 Journal Citation Report (JCR) Social Science, these journals and their impact factors as follows: Journal of Educational Psychology (IF: 5.30), Educational Psychologist (IF: 4.16), Educational Researcher (IF: 3.91), and American Educational Research Journal (IF: 3.61). An investigation form was prepared with regard to research questions by authors. This form included eight main sections stated above. The results of content analysis were descriptively presented in the forms of charts and frequencies tables. Finally, Cohen's kappa was calculated to examine the inter-rater reliability.

## Findings

According to results of content analysis, it was found that most common studied keywords were achievement, education policy, and motivation throughout the years. This study also found that generally the time between submission and admission of papers was 11 months. The average numbers of the participants in the studies were 79371. On the other hand, it was found that 107 research studies did not indicate the number of the participants. Some of these studies in which the number of the participants was not revealed were theoretical study. Moreover, it was found that "Mplus" software was commonly used in all of the journals stated above. To state in terms of years, this software was also commonly used in all years. The fact that analysis of variance (ANOVA), regression analysis and hierarchical linear modelling (HLM) was commonly conducted in all of the journals was another finding of this study. Similarly, ANOVA, regression analysis, HLM and structural equation modelling (SEM) were commonly conducted throughout the years. The other findings of the current study will be revealed in the full text form.

## Conclusions and Suggestions

This study showed that the subjects: achievement and education policy were focused on by researchers whose papers published in journals having high impact factor. Another important finding was that the size of sample was high in these selected journals. This finding indicates the important role of councils, institutions providing data sets to researchers. On the other hand, sample size of the studies in Turkey is very low generally since such institutions do not provide data sets. Arık and Türkmen (2009) found the average of the sample size as 1129 in several Turkish Education Journals. This study contributed to existing finding regarding the types of analyses (Arık and Türkmen, 2009; Selçuk et. al, 2014; Willson, 1980). Further discussion and conclusions will be given with related literature in fulltext.

**Keywords:** educational journals, impact factor, content analysis

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# **The Effects of Language Partnership Known as Tandem on Turkish Language Learners' Speaking Anxiety**

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TANDEM has been one of the language learning techniques used mostly thanks to the online cooperation among universities by the universities, research circles and students across Europe since 1993. At first, TANDEM was created as the digital web system sponsored by The European Union. The aim of this system is to enable two people speaking different languages to share their cultural properties and to help with the language they speak and to instruct the foreign language and the culture of it in its natural and real atmosphere. Today it is also possible that TANDEM is used through face- to-face instruction. The studies and discussions on the effects of anxiety on language learning have started with Horwitz and Cope. "Horwitz, Horwitz ve Cope, (1986:285) states that learners' feelings, thoughts and beliefs will influence the classroom activities and give rise to anxiety." "Learners' anxiety over making mistakes and their beliefs that the people around them will react towards these errors may lead to anxiety (Özdemir 2013: 54)."

In Common European Framework, it has been emphasized that language instruction is to be through interaction. "Language learning means learning the culture of the target language since people communicate with the lexis and concepts that belong to their culture (Barin, 1992: 53)." In this case, utilizing real life situations and linguistic contexts are of great importance for language instruction. Language partnership has been designed taking this idea into consideration and everyday life situations with their peers have been created and experienced.

In this study, the effects of language partnership known as TANDEM in Europe on the Turkish language learners' speaking anxiety have been researched. In this study, the foreign students learning Turkish at Nevşehir Hacı Bektaş Veli University have leagued together with the student teachers at Turkish Language Education department for 6 weeks in the scope of this language partnership.

The study has been designed with real experimental research pattern. In this study, as a kind of experimental design with pre-test post-test control group real test model using the model was used.

Three 20 student sections of B1 level students have taken their level courses since A1 at NHBV University TOMER and placed to their next level based on the placement test by TOMER. Seeing that these different group of students have had the same level achievement rate, this study has been designed on a real experimental research pattern.

The researcher has randomly identified two groups among these students one of whom has been identified as the experiment group and the other as the control group. The experiment group has been instructed what the language partnership is and the convenient time periods to

interact with the student teachers at Turkish Language Teaching department per week have been determined. The students from TLT department has been decided on a volunteer basis.

Before the implementation, the scale “The Sources of Speaking Anxiety in Learners of Turkish as a Foreign Language” by Ozdemir (2013) with high validity and reliability has been applied on both the experiment and control groups. Upon the implementation of the scale, the 6 week language partnership (TANDEM) has been applied. The program was designed as two hour interview sessions twice a week. At the end of the 6 week period, the scale “The Sources of Speaking Anxiety in Learners of Turkish as a Foreign Language” by Ozdemir (2013) with high validity and reliability will be applied on both the experiment and control groups and the data obtained will be analyzed through SPSS program.

**Table. 1 Experimental Procedure Diagrams Showing**

Groups	Pre-test	Experimental Procedure	Post-test
		<b>6 Week</b>	
Experiment	SSA	Language Partnership	SSA
Control	SSA	TOMER	SSA

SSA: Scale of Speaking Anxiety

To analyze the data, for frequency, percentage, average and standart deviation Independent Groups T-test, for correlated samples T-test (in case of inaccuracies with normality hypothesis Wilcoxon signed rank test will be used to conduct necessary measures) will be used.

**Keywords:** Language Partnership- Tandem, Turkish Language Learner, Speaking Anxiety

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## **Effect of Problem Posing Applications in Teaching Science on Teacher Candidates' Problem Posing Skills and Their Metacognitive Awareness**

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In recent years, in all the curriculums of science, physics, chemistry, and mathematics courses, the importance of improving students' problem-solving skills, so that they will have the necessary skills to solve problems faced in daily life and overcome challenges, is emphasized (MEB, 2013). Mathematical problem solving includes situations ranging from routine mathematical problems to problems about unknown topics and open-ended research related to mathematical and thinking problems (Akay, 2006). Problem solving is considered as scientific method, critical and creative thinking, and the scientific process skills that will be gained through numerical (routine) and daily (non-routine) problems in the field of science, chemistry and physics as well. It is defined as students' skills to solve problems of daily life and as the ability to produce new knowledge. With this approach, it can be said that the noble goal of problem solving is to contribute to the cognitive development of students not to solve questions which have certain solutions. In this case, students should be aware of everything done at each stage of the learning process. In only such an environment students can be understood and, in this situation, we can expect them to accept and comprehend the new information they achieve. The science teaching approach accepting this purpose is considered as "problem posing". The importance of the problem posing approach is encouraging students to improve their existing conceptual understanding via their own experiences and beliefs. For this reason, according to some metacognitive perspectives, in teaching, more emphasis should be given to problem posing rather than problem solving.

Metacognition is defined as individuals' awareness about their own learning and being able to give feedback on their learning processes. Shortly it can be determined as a way of learning to learn and it contains two types of skills including self-evaluation and self-management (Çakıroğlu, 2007). Consideration of students being able to assess their knowledge and abilities and being aware of themselves and their learning processes makes the problem posing approach even more important in teaching various subjects. For this purpose, learning environments should be arranged so that students would not solve problems with memorized formulas and already known answers. Instead, students should be able to reflect and develop their existing knowledge and should have an opportunity to produce their own problems. Students can be encouraged for problem posing by asking them to create new problems via changing the conditions of the already given problems or formulating new problems based on given situations.

When all this information is evaluated, it is seen that in science teaching students are expected to actively participate in the learning process, to question, explore, and discover what they are learning. In this way, the aim is to prove students' cognitive development, to develop their critical and creative thinking skills, and to train them as individuals who can solve problems of the daily life.

When the problem posing approach is investigated it was seen that it was only used in teaching mathematics. However, studies showed that in this approach students become: active

learners, able to produce new problems by using their already existing knowledge, aware of their own learning, and better problem solvers. In this case if the problem posing approach is used in teaching science courses, individuals can be trained in line with the goals of the science curriculum. Thus, students would be able to assess their knowledge and develop their metacognitive awareness. However, due to the problem posing approach is not in use like other methods in science education it is unknown by teachers. Thus, teachers are not likely using this approach when teaching their curriculum. Students should go beyond the “only solving problems” stage and should be given opportunities to be trained in an environment in which they can solve creative problems and pose their own problems (Akay, 2006). So teachers can have chances to recognize the problem posing approach. Also by being familiar with this approach enables teachers to establish and obtain practical skills that they can reflect into their professional lives.

For this purpose, in this study, elementary school teacher candidates will be trained using the problem posing approach while learning the topic of intensity in science curriculum. Students will have opportunities to pose problems according to different strategies.

### **Method**

The total of 27 teacher candidates will take place in this five weeks long study. These teacher candidates will have training one hour a week. Their performances on problem posing will be assessed based on the rubric developed by Ergün, Gürel and Çorlu (2011). In order to determine the effects of using this approach on teacher candidates' metacognitive awareness pre-post-test design will be used. The test was developed by Yıldız, Akpınar, Tatar and Ergin (2009) and the results of this test will be assessed by t-test.

### **Findings and Conclusions**

Since this is an ongoing study the findings of the study are not obtained. Findings, discussion and recommendations will be completed by the conference date. Because this study is the first one investigating the effects of the problem posing approach in teaching science, the obtained findings can provide recommendations for future studies and science teachers.

**Keywords:** Problem posing, science teaching, metacognition

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**THEME 11:**  
**Early Childhood Education**

# Analysing Father's Involvement Status in Family Participation Activities on Pre-School Children's Behavioral Problems

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Early childhood years are crucial in terms of these years provide positive results to enable skills for children in social environment and that they learn acceptable behaviors on social aspect in social life. Especially in these years it is inevitable that children whose social developments are not supported by family-school cooperation demonstrate problematic behaviors. In spite of researches focus on mother's importance and effect depending on child's spending most of his time with his mother, there are also studies that openly show that fathers' attention, love and participation are effective on children's' psychological goodness and behavioral problems (Carlson, 2006; Gültekin Akduman and Türkoğlu, 2013). Implemented researches emphasize that fathers who participate their children's' care and education have more effective and making lasting impact on developments and learning of his child and, compared to whom not participating they have important impacts on child's cognitive, social and psychological improvement and subjective being good (Coakley, 2013; Flouri and Buchanan, 2002, 2003). In the process of children's' becoming socialize adopting social life by gaining needed skills and preventing behavioral problems are under the effect of fathers because of their role model specialties. At this point providing the continuity of behaviors gained in school is directly related with participation of fathers in education of their children. Therefore, this study is to aim analyze effects of fathers 'participation situations in family activities who have pre-school period children on their children's internalizing, externalizing, antisocial and self-centered behavioral problems.

## Method

The research is the descriptive study that screening model is used. The scope of research consists of kindergartens of official schools in center districts of Ankara Province; Çankaya, Mamak, Altındağ, Yenimahalle, Keçiören, Sincan and Etimesgut and 48-60 month and above children who continue their education in official independent kindergartens and their fathers (N=25478). Sampling of the research consists of 533 children who were randomly selected simple sampling method and their fathers. In the research "*General Information Form*" and "*Problem Behavior Scale*" were used.

**General Information Form:** On purpose of defining demographic characteristics of fathers and children who participated to the research, General Information Form consists of items to know information about participation situation of fathers, education status, etc.

**Problem Behavior Scale:** It is composed of two independent scales, *Preschool and Kindergarten Behavior Scale (PKBS-2)* developed by Kenneth W.Merril in 1994 to measure 3-6 ages of children's' social skills and problem behaviors in preschool period, and *Social*

*Skill and Problem Behavior Scales*. The Validity and the Reliability study for Turkish children were implemented by Alisinanoğlu and Özbey (2009), in this research Problem Behavior Scale was used. Problem Behavior Scale consists of 4 factors; *internalizing, externalizing, antisocial and self-centered*. The total values of Cronbach Alfa values is .96

Total data was analyzed by using SPSS 15.00 drive in the research. In evaluation of data descriptive statistics and one-way analysis of variance were used.

### **Findings and Conclusions**

As a consequence of research findings demonstrated that fathers' participation situations to family participation activities create significant difference in children's' scores of externalizing, antisocial behavior problems environments ( $p < .05$ ). On the other hand it was determined that children's' whose fathers never participate in family participation activities, ' scores of internalizing, externalizing, antisocial, and self-centered behavioral problems and total behavioral problems' scores are higher than children whose fathers participate sometimes or always.

Similar researches verified existence of negative significant relationship among father participation and externalizing problematic behaviors and behavior of despotism (Flouri and Buchanan, 2003). Also research finding shows parallelism with Howard, Lefever, Borkowski and Whitman's (2006) research analyzing fathers' effects on their children. According to this, it was seen that children whose fathers' participation and father-child interaction are at high level show less behavioral problems, in addition to this they have higher academic scores. Zhang (2013) determined in his research that he analyzed father and children relationship and relations of children's' social competences dually, children' social competences having children-father conflict in higher level after they start preschool education, stay in low levels.

### **Suggestions**

When results of research are compared to other research results; it is possible to say that fathers' participation to preschool education of children is strong variance that predicts children's behavioral problems. In this respect;

On the step of family participation activities, planning and implementation initially they are activities that are under the responsibility of teacher. In this respect it is suggested to teachers that they should accompany to needs of children and parents, guide for supporting children in home by informing family about activities in school and children's developmental characteristics.

**Keywords:** father participation, problem behaviors, pre-school education.

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## **Analysis of the Attitudes of the Parents towards Sexually Abused Children**

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Childhood sexual abuse is a severe public health problem causing injuries, disabilities and even death and alarming serious concern for medical, legal and social fields which can be collected under four headings such as physical abuse, emotional abuse, sexual abuse and neglect (Turhan et al., 2006, p. 153). Sexual abuse is defined as a situation where an adult, who is at least six years older than a child, uses a child for his sexual satisfaction or seeks to let the others use the child for such purposes by threat, force or by convincing the child (Yıldırım Doğru, 2012, p. 74).

Although child sexual abuse has been the issue known for ages, there has been an increase in child abuse cases for the last years (Ovayolu et al. 2007, p. 14). Sexual abuse of children is regarded as a very common and serious problem and it may affect everybody regardless of age, sex, socio economic class and geographical region (İnan, 2010).

It is observed that the effects of sexual abuse on children may vary depending on the relations between the child and the perpetrator, manner of sexual activity, use of violence, existence of bodily harm, collaboration of the child, age, development stage and psychological development prior to trauma . Reactions of the parents to the incident also play a dramatic role on the issue. The reactions of the child may reveal as fear, depression, attention deficit, hyperactivity disorder, secondary enuresis and encopresis, behavioral problems, school problems and sexual problems (Ovayolu et al, 2007, p. 16). It was observed that children exposed to sexual abuse fear that they might be recognized in the society depending on the attitudes of the family members and the public as well.

This research was conducted to examine the attitudes of the parents towards children who are sexually abused.

The model in this research where the attitudes of the parents and preschool teachers towards sexually abused children is descriptive model. As the data was collected from the sampling of a population determined previously the study is a cross-sectional description. Taking into analysis of the data into consideration, the study requires intergroup comparison as well as descriptive techniques. Therefore, this study includes relational screening model, one of the survey models (Seyidoğlu, 2009, p. 33-34).

In this context;

The population of this study is composed of parents of 36-60 months and older children attending to pre-school classes of public elementary schools and officially independent nurseries in Ankara Etimesgut.

When determining the sample for the study, between 5 % of sensitivity, and 95 % of confidence interval was taken into account and Ryan's (1995) formula was used to calculate

the size of sample. Accordingly, 354 parents were determined as sample subjects and 210 parents contacted formed the population of the study.

In the study, in order to determine demographic characteristics of the parents, a “Personal Information Form” developed by the researcher was used for parents and teachers; and in order to measure attitudes of the parents towards sexually abused children; the “Attitude Scales Against Sexually Abused Children” was used.

The data obtained in the study was analyzed with t test and One-Way Variance Analysis (ANOVA) in accordance with the number of categories in independent variables in SPSS 20 software package. Through statistics, significance level was chosen as 0,05.

In conclusion, it was found that attitudes of parents towards sexually abused children did not reveal a significant statistical difference in terms of gender of the parents, experience with sexually abused children, educational background, previous training on sexual abuse of children ( $p > 0,05$ ).

In addition, it was found that there was statistically significant difference regarding attitudes of the parents towards sexually abused children in terms of the parents’ age, their earlier training on children rights, their earlier training on negligence and sexual abuse of children ( $p < 0,05$ ).

As suggestions, attitudes towards children exposed to sexual abuse are of great importance in terms of reducing the effects of abuse on children, enabling them to participate to the social life and develop a healthy personality in the future. Parents should be trained about every aspect of developmental stages in order to follow the developments of their children closely and recognize any changes in such developments.

It is therefore necessary that the content of the child safety courses including child rights, child abuse and neglect should be prepared by the specialist and the subject should be taken by pre-school candidate teachers as a compulsory course.

TV programs may also be made with the specialists and cartoons may be prepared for young children.

The relevant institutions should do some research regularly and the children in need of protection with higher abuse risk should be watched closely and protected. Researchers may conduct a study about parents’ knowledge and awareness of child sexual abuse. Also, it may be helpful to survey which variables differentiate teachers’ knowledge and awareness of sexual abuse and what the effects of the attitudes of the parents towards the child exposed to sexual abuse on children would be. They may also investigate the effects of teachers’ attitude towards sexually abused children over children.

**Keywords:** Sexually Abused, Child Abuse, Child Neglect, Attitudes

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## Early Childhood Care and Education in Welfare Regimes of Europe

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In this study, early childhood care and education is discussed within the welfare regime conceptual framework by using data from the European Union. According to the current study, although all ten of the selected countries are members of the European Union and are obliged to fulfill the same social and economic requirements, early childhood care and education is generally shaped by the characteristics of their respective welfare regimes.

The Liberal welfare regime is distinguished through the domination of the market in the management of social risks, modest universal transfers and social insurance plans, and means-tested social assistance (Esping-Andersen 1990, 1999). Benefits are highly stratified based on means-tested and flat-rate assistance for the poor and private pension schemes based on contributions in working years. This stratification among social groups also leads to inequalities in this welfare regime.

In contrast to other welfare regimes, the Social Democratic welfare regime emphasizes the role of the state to provide for its citizens' social well-being, rather than the market or the family. This group promotes a high standard of social equality where all people are incorporated under one universal system.

The Continental European welfare regime has a corporatist and conservative welfare tradition heavily influenced by the state. The main characteristics of this regime are the emphasis on the preservation of status differentials, and the institutionalization of rights attached to social class rather than citizenship (Esping-Andersen 1990). Given that early childhood services depend on one's occupational earnings in such countries. Parallel to the Southern European welfare regime, gender inequality and high youth unemployment rates are two important problems of the Continental European welfare regime. However, this regime produces generous occupational rights and high pension benefits for its citizens.

In addition to Esping-Andersen's three-fold typology, the Southern European cluster (Greece, Italy, Portugal, Spain, emerges as a distinct fourth group through its unique institutional and social characteristics (Leibfried 1992; Ferrera 1996; Trifiletti 1999; Gough 2000). This regime is based on strong familialism, a residual form of social assistance, a low degree of state intervention in welfare, patronage, universal health care, and clientelism. The pension structure is dualistic: on the one hand, pension programs of this group offer one of the most generous pension benefits for public employees and skilled workers; on the other hand, a great number of workers, who work in non-standard and temporary jobs (service jobs, agriculture, and small merchants) lack social security in case of unemployment and are severely disadvantaged in old age. This dualism also separates the Southern European welfare regime from the Continental European regime which has much smaller income variations

between high and low income pensioners and much larger proportion of recipients of relatively higher pension incomes.

OECD (2013; 2014) and EUROSTAT (2009; 2014a; 2014b; 2014c) data were exploited to make the comparison. While the formal early childhood education system is more developed and available in the Social Democratic welfare regime, it is not possible to speak of a common formal care and educational services especially for the 0-3 age group in the Continental European and South European welfare regimes. It is claimed that even though the countries try to pursue the social and economic objectives of the European Union; they remain dependent on their own welfare regimes in early childhood care and education. Additionally, formal care and educational services, which are important social policy tools for individuals to achieve work-life balance, are discussed for their positive influences on the child and the family, and in the last part, policy recommendations for early childhood care and education are offered.

**Keywords:** Early Childhood Care and Education, Family, Social Policy, Welfare Regime, Europe

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## **The Relationship Between Six-Year-Old Children's Emotional Intelligence Scores and Their Mothers' Depression Scores**

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As well as the formation of the first years of life personality, is the most important period in the development of attitudes in conferring a certain direction and behavior patterns. People are not born as having attitude. Request attitudes formed in the process of change over time and show progress and the satisfaction of the individual, they reflect social norms and cultural values (Ömeroğlu, 1996, s. 74-75).

Pre-school is a critical period in terms of social and emotional development. During this period, family members are the most effective on the child. In recent years, the widespread use of preschool education and teacher training programs have also come to the position of vital importance in supporting the child's developmental sense. Major duties of parents and teachers in terms of the development of social and emotional skills fall (Saltalı, 2013).

Family environment in which the child grows is very important for the development of emotional intelligence. Family life is the first school was given the emotional lessons. This emotional lessons they just say directly to parents with children, and they do not, their articulate their feelings and given also the interaction between the model (Goleman, 1996).

Considering the factors that affect the child's emotional intelligence age, brain development, family environment, temperament, economic status, gender, culture, and it is noted that factors such as being a model to be effective. Be a model for the acquisition of emotional intelligence skills at an early age is very effective. Children before parents, then take the model of the teacher. By observing the social relations in which they live their feelings and reactions of adults also develop methods to control their emotions. Parents and teachers of children with appropriate behavior in accordance with the development of the model and give a good opportunity to use these capabilities, it is important for children to gain emotional intelligence (Sullivan, 1999, s. 3; Ashiabi, 2000, s. 80; Shapiro, 2000, s. 197).

Attachment to the mother's level from infancy child, the sensitivity shown by the adults to the feelings of children, parents or teachers' attitudes (coercive, supportive, tolerant, etc.) And be open to understanding emotions, can be effective in emotional intelligence (Zeidner, Roberts and Matthews, 2002, s. 220).

This study is planned to investigate the relationship between emotional intelligence scores of six year old children and depression scores of their mothers.

## Methods

### Research Design

This research is a descriptive model. Research, considering the analysis of the data, as well as the descriptive technique and intergroup comparisons, requires both correlational analysis. Therefore, research, public screening of the model has a relational model feature (Karasar, 2012, s. 77).

### Population and Sample

The universe of the 2014-2015 Academic Year - pre-school in Ankara. Schools affiliated to the Ministry of Education Rod district in the center due to the ongoing training of 60 months and older, and this makes their mothers. 2014-2015 Academic Year - in the bar district's kindergarten and continuing to preschool children 60 months and over the total number is 1104. The universe (N = 1104) were calculated using a minimum sample volume formula through sampling formula 89. Total sample size was distributed in proportion to their weight to the layer (Çingı, 1990). Ölçek evaluation of the application is also considered generally 6 subjects per article aims to discuss minimum 89 and a maximum of 192 test subjects. 89 subjects will be sufficient in terms of sensitivity, in terms of the number of items of the scale are expected to be made applications up to 192 subjects.

### Data Collection Tool

To collect data; prepared in order to obtain demographic information for children and their mothers "General Information Form for Children" and "General Information Form for Mothers", in order to measure their children's emotional intelligence level "Emotional Intelligence Scale for Sullivan Kids' and mothers in order to measure the level of depression" Beck Depression Inventory "will be used. Emotional Intelligence Scale for Sullivan Children, Sullivan (1999) emotion recognition developed by managing emotions and understanding emotions based on their emotional intelligence skills, such as faces, stories, consists of Understanding and Managing section. The Turkish adaptation reliability and validity of the scale by Ulutaş (Ulutaş, 2005, p. 58), were used to test-retest reliability. Beck Depression Inventory developed by Beck in 1961 and it is adapted to the reliability and validity of the Turkish society by Hisli. Inventory is a 21-item self-report scale types. Agents are evaluated on a scale ranging from zero to 3 degrees according to the seriousness of depression. Rate ranges are 0-63 (Hisli, 1989).

### Analysing The Data

Process of data analysis is ongoing.

### Findings, Conclusions and Recommendations

After analyzing the data collected will be entered in this part of the research findings.

**Keywords:** Preschool Education, Emotional Intelligence, Depression

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## Family Relationships of Working and Non-Working Mothers and Emotional Skills of Their Children

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Emotions emerge as a reaction to different situations and experiences and every person feels and reacts differently to a certain situation (Bayhan and Artan, 2005). Emotional skills refer to a person's ability to identify his/her emotions, understand the emotions of others and express them and adjust their emotions to the requirements of a certain environment (Saltalı, 2013). One of the fundamental responsibilities of parents is that they raise their children as healthy individuals by meeting their children's physical, social and emotional needs (Öngider, 2013). In this regard, the role of parents as a role model, their positive interaction with the child and their attitudes and approach to the child play a significant role in social-emotional development of the child (Özyürek, Ceylan, 2014). The relationship between parents and their children and between parents themselves and also the quality of this relationship is crucial to the healthy development of children. The younger the child is, the greater his/her emotional need is for his/her parent and it is really important for their children's development that parents are very sensitive to the relationship that they establish with their children especially during preschool years (Öngider, 2013). In this sense, it has become more of an issue to investigate the effect of employment status of mothers on their family relationships and children's emotional skills. Accordingly, the present study serves the purpose of investigating the family relationships and children's emotional skills among working and non working mothers with children between 48 and 72 months of age.

**Method:** The study was conducted using the correlation survey approach within the general survey methods. The sample of study included 456 mothers and their children aged 48 to 72 months. 239 (52.4%) of the mothers were employed and 217 (47.6%) were unemployed. 154 (33.8%) mothers were civil servants, 31 (6.8%) were self-employed, 54 (11.8%) were workers and the majority of the mothers 217 (47.6%) were home makers. The educational status showed that 140 (30.7%) mothers had completed primary school, 123 (27%) had secondary school education and 193 (42.3%) of the mothers had received undergraduate or higher education. The age groups were as follows; 20-25 years, 39 (8.6%) mothers; 26-30 years, 131 (28.7%) mothers; 31-35 years, 203 (44.5%) mothers; 36-40 years, 58 (12.7%) mothers and 40 or older, 25 (5.5%) mothers. 122 (26.8%) mothers had only one child, 226 (49.6%) mothers had two children, 86 (18.9%) had three children, 15 (3.3%) mothers had 4 children and 7 (1.5%) mothers had five or more children. The study utilized Parental Acceptance-Rejection Questionnaire-Mother Version (PARQ), which was developed by Rohner, Saavedra and Granum (1980), translated to Turkish by Polat and Sunar (1988) and revised for the final form by Anjeland Erkman (1993). Cronbach's Alpha and Pearson's correlations were calculated for the internal consistency of the form. Cronbach's Alpha was found .90 for the entire test. The correlations between sub-tests total scores ranged from .75 to .86. The item-total correlations varied between .16 and .59 (cited: Öner, 1996). Emotional skills of children were analyzed by

means of the Assessment of Children's Emotion Skills, which was developed by Schultz and Izard (1998) and translated to Turkish by Durmuşoğlu Saltalı, Deniz, Çeliköz and Arı (2009). The factor analysis performed to identify content validity of the test indicated that factor loads ranged from .35 to .59 in identification of the emotions; from .30 to .63 in understanding emotions and from .31 to .68 in expressing emotions. The split-half method used to assess the reliability of the test showed a value of .87 for the understanding, .82 for the identification, .78 for the expression of emotions, with a total score of .79. Independent samples t-test was conducted to determine whether family relationships of mothers differed based on employment status of mothers and whether children's emotional skills showed a difference based on having a working or non-working mother. Pearson's Correlation Coefficients were calculated to evaluate the correlation of family relationships of mothers with 48-72 month old children's emotional skills.

**Results:** Independent samples t-test results indicated that mean scores of non-working mothers were higher than that of working mothers in parental warm than love, with a significant difference in favour of non-working mothers. In respect of the effect of maternal employment status on children's emotional skills, it was seen that working mothers achieved higher mean than non-working mothers in the identification, understanding and expression of emotions, with significant differences in support of working mothers. According to Pearson's Correlation Coefficients, there was a strong significant positive correlation found between family relationships of mothers (working and non-working) and children's emotional.

**Keywords:** child, employed mother, unemployed mother, parental relationships, emotional.

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# The Analysis of the Social Skills of Preschool Children According to the Type of Educational Program They Receive

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**Purpose:** Researchers have worked to develop interventions capable of improving children's social skills (Mize & Ladd, 1990). Children's social behaviors are often supported in most of preschool settings such as Montessori Method. Today the Montessori teaching method is used to train children in the areas of practical life sensorial experiences, language, math, engaging and maintaining the environment, science, and social skills. It is developmentally and programmatically based (Camp, Judge, Bye, Fox, Bowden, Bell, Valencic, & Mattern, 1997).

The aim of this study is to analyze the social skills of preschool children according to the type of educational program they receive. In this study, the social skills of 5 years old children who took education according to Ministry of Education Preschool Education Program and Montessori educational approach were evaluated.

**Research design:** The study was designed in quantitative research approach and survey method was used. This descriptive study is based on the relational scanning model (Karasar, 2006) for the assessment of social skills and problem behaviors of children according to the type of educational program they receive.

**Participants:** Participants consisted of 300 children aged 5 who continue their preschool education according to Ministry of Education Preschool Education Program and Montessori educational approach in 2013-2014 academic year. The study was conducted with 40 teachers from 23 different schools in Istanbul city, Kucukcekmece, Bahcelievler, Cekmekoy and Maltepe districts. 54.1% were girls, 45.9% were boys attending the Ministry of Education Preschool Education Program and 47.9% were girls, 52.1% were boys attending the Montessori educational approach.

**Data collection tools:** The data of the study were obtained through Personal Information Form developed by the researcher and Social Skills Scale adapted by Elibol Gültekin (2008). In teacher form of preschool version, Social Skills are evaluated as three subscales (cooperation, self-control and self expression) and Behavior Problems are evaluated as two subscales (internal problems and external problems). Social Skills Scale includes the 3-5 age range and Scale's Internal consistency for all forms total Cronbach's n Alfa value was found within the range of 0,83 to 0,94 (Elibol Gültekin, 2008).

**Analysis of Data:**The data of the research have been analyzed in the packaged software of SPSS. In this study, social skills of children were determined with regard to their age, gender, birth order, duration of preschool attendance and number of siblings. Parents were evaluated with regard to age, educational level and family income level. While determining social skills of children, t test, ANOVA, Kruskal Wallis H Test and Mann-Whitney U test was used. In the study, significance level was accepted as 0.05.

**Findings:**According to the analyses, it was found that the communication skills of children who take education according to Ministry of Education program were higher than those of children who take education according to Montessori approach. It was also found that the behavior problems of children who take education according to Ministry of Education program were higher than those of children who take education according to Montessori approach. While there was no difference in children's social skills according to their gender, father's age and the number of siblings, there was a significant difference in children's social skills according to their mother's age, education degree of their parents, level of income of the family and duration of preschool attendance.

The following recommendations could be made of this study for future researches:

- The results compared with different researches performed with different sample groups.
- Children's social skills is comparable with children attending the Ministry of Education program to some of different approaches.
- Experimental studies can be made to support children's communication skills attending the Montessori approach class.
- Experimental studies can be made to reduce problem behaviors of children attending the Ministry of Education program.
- In order to support social skills of children can be prepared programs for families with low levels of education and studies about the effectiveness of these programs can be examined.

**Keywords:** Preschool Education Program, Montessori Approach, Social Skills, 5 year old children

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## **Examination of the Effect of Perspective-Taking Skills of Six Year Old Children on Their Social Competences**

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In the preschool period, children learn numerous skills in emotional and social aspects (Hay, Payne & Chadwick, 2004). Among these skills; perspective-taking and social competences attract the attention due to their short and long-term effects and the fact that they affect a significant amount of development areas. Perspective-taking skill is expressed as the process in which a person thinks and feels like another person by placing themselves into the other person's position. It is also defined as the emotional reactions shared in the child's life as a result of their ability to understand what another person sees and thinks and as an emotional reaction to them (Eisenberg 1995, Köksal, 2000; Köksal Akyol& Körükçü, 2003). When the perspective-taking skill in childhood is analysed socially, it is seen that the child is in need of healthy parental attitudes and educator attitudes and it is important to create an emphatic environment for the child (Dökmen, 2004). Social competence implies certain social, emotional, cognitive skills and behaviours needed by children to adapt to their society successfully (Çorbacı-Oruç, 2008). One of the variables that affect social competence is emotional skills (Denham, 2007). Perspective-taking skill, involved within social skills as well as emotional skills can make contributions to the fact that individuals are able to interpret their own feelings and others' feelings and give reactions appropriate to such interpretations (Trentacosta, 2006). It has been determined that emotional and social skills in preschool period are related to many variables particularly being loved by peers and adaptation to school (Bierman, 2005). As a result of the conducted literature review, no study examining the perspective-taking skills and social competences of preschool children in Turkey has been found. Studies examining these concepts which are very important for the development of young children are required.

The purpose of this study is to reveal the effect of perspective-taking skills of six-year old children on their social competences. The sub-goals of the study are as follows:

- Does the cognitive perspective-taking skill of six-year old children predict the variables of entering a peer group, reaction to provocation, reaction to failure, reaction to success, social expectations, teacher expectations, reactive aggression, and proactive aggression in a statistically significant way?

- Does the perceptual perspective-taking skill of six-year old children predict the variables of entering a peer group, reaction to provocation, reaction to failure, reaction to success, social expectations, teacher expectations, reactive aggression, and proactive aggression in a statistically significant way?
- Does the affective perspective-taking skill of six-year old children predict the variables of entering a peer group, reaction to provocation, reaction to failure, reaction to success, social expectations, teacher expectations, reactive aggression, and proactive aggression in a statistically significant way?

Relational survey method was used in the study. Relational survey method is a research model that aims to determine the presence and/or degree of covariance among two and more variables (Karasar, 2009: 81). Determined by two independent kindergarten at Yenişehir district in Mersin as research working groups. 115 children (59 girls, 56 boys) in the age group of 6, who voluntarily agreed to participate in the study, consisted the study group of the study. Personal Information Form, Perspective-Taking Test and Problem Classification Scale for Children in Preschool Period (PCSCPP) were used as the data collection tools of the study. Problem Classification Scale for Children in Preschool Period is an assessment instrument used for revealing the social competences of children. Problem Classification Scale for Children in Preschool Period involves 8 subscales (entering a peer group, reaction to provocation, reaction to failure, reaction to success, social expectations, teacher expectations, reactive aggression, and proactive aggression) and 60 items. The scale is a five-point likert type scale that aims to evaluate the reactions given by children in cases of problems. This assessment instrument was developed by Blankemeyer, Culp, Hubbs-Tait and Culp in 2002 (Akt. Çorbacı-Oruç, 2008, p. 64) and was adapted to Turkish by Çorbacı-Oruç in 2008. Problem Classification Scale for Children in Preschool Period was filled in by preschool teachers for each child. Perspective-Taking Test is an assessment instrument that aims to measure three different aspects of perspective-taking skill. Perspective-Taking Test includes three sub-scales; Perceptual Perspective-Taking Test, Cognitive Perspective-Taking Test, and Affective Perspective-Taking Test. This assessment instrument was developed by Şener (1996) and its validity reliability study was conducted by Akın (2002). Şener (1996) developed the test by making use of the study conducted by Kurdek and Rodgon (1975). The Perspective-Taking Test was applied by researchers on children individually and by turns (Perceptual Perspective-Taking Test, Cognitive Perspective-Taking Test, Affective Perspective-Taking Test). While conducting the study, no break was taken between the three tests in order not to let the child get distracted and pull away from the study. Simple Linear Regression Analysis technique was used to analyse the data of the study. According to the results, the Cognitive Perspective-Taking skill of six-year-old children predicted variables of entering a peer group, reaction to provocation, teacher expectations, and reactive aggression in a statistically significant manner. However, the Cognitive Perspective-Taking skill of six-year-old children did not predict variables of reaction to failure, reaction to success, social expectations, and proactive aggression in a statistically significant manner. In addition, perceptual and cognitive perspective-taking skills did not predict the variables of entering a peer group, reaction to provocation, reaction to failure, reaction to success, social expectations, teacher expectations, reactive aggression, and proactive aggression in a statistically significant manner.

**Keywords:** Perspective-taking, social competencies, preschool period.

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# Investigating the Changes in the Perceptions of Preschool Teacher Candidates on Gifted Children

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## Purpose

Beginning from preschool, behavioral traits related to giftedness start being observable. The perceptions of preschool teachers on children with such traits has direct impact on the children's ability to become successful individuals in the future. Existing literature does provide characterizations of how teachers perceive gifted children from different age groups (Bangel, Moon & Capobianco, 2010; Carman, 2011; Rohrer, 1995; Çapan, 2010; Ribich, Barone & Agostino, 1998; Siegle & Powell, 2004; Tortop, 2014; Özsoy, 2014). On the other hand, there are only a few studies focusing on changes in this perception of preschool teachers and teacher candidates as a result of activities combining practicums and workshops related with gifted children.

The goal of this study is to identify the perceptions of preschool teacher candidates on gifted children, who exhibit developmental traits that are different from other children, and examine the changes in these perceptions resulting from practicums and pre-service workshops. More specifically, expected outcomes for this study can be clarified with the following research questions:

1. What were the specific *perceptions* of preschool teacher candidates on gifted preschool children?
2. How did the perceptions of preschool teacher candidates on gifted preschool children change as a result of the *practicums* they attended?
3. How did the perceptions of preschool teacher candidates on gifted preschool children change as a result of the *workshops* they participated in?

## Method

This study adopts a qualitative method (Büyüköztürk, Akgün, Karadeniz, Demirel & Kılıç, 2013) of content analysis (Yıldırım & Şimşek, 2013). Participants in this study were 8 college students; 3 male and 5 female, who were preschool education teacher candidates. All of these students went through 14 weeks of practicums in a school attended by gifted preschool children. The practicums were 4 hours each week, resulting in a total of 56 hours for each preschool education teacher candidate. During these practicums, these 8 college students also participated in educational workshops on developmental traits of gifted children for a total of 12 hours at their university. At the end of the study, all students were interviewed in order to assess the effects of the 56-hour practicum experience and the 12-hour workshop experience

on the perceptions of the teacher candidates on gifted children. Questions on the interviews were semi-structured, with 8 open-ended questions to assess how opinions of teacher candidates were affected by the practicums and educational workshop experiences. Interviews were recorded in both video and audio by the researchers. These interviews were then transcribed, and subsequently analyzed by the researchers.

## Findings

The findings of this study revealed that before this study, college student participants had never met/encountered gifted preschool children, and had not previously received training specifically related to children in this group. Prior to the study, it was observed that the majority of the participants perceived that gifted preschool children might be particularly successful in mathematical and quantitative/numerical fields, have know-it-all and questioning social-emotional attitudes and could be developmentally advanced and successful across all fields. After the study, participants indicated that they were previously prejudicial towards gifted individuals, but that their perceptions changed in a positive direction as a result of the practicums and workshop experiences. They observed that both the practicums and the workshop sessions were very helpful in both learning about and understanding gifted children. Moreover, following the study, they all agreed that education for gifted children should be differentiated based on their specific talents. These findings are similar to previous research showing that both teachers and teacher candidates have stereotypical preconceptions on gifted children (Carman, 2011; Siegle & Powell, 2004) and that education and workshop experiences can help improve these preconceptions (Bangel, Moon & Capobianco, 2010).

## Suggestions

Based on the findings in this study, it can be concluded that it is important to enhance educational programs for teacher candidates with topics on the identification, behavioral traits and education of gifted children. It can be suggested that in-class and out-of-class curricular components and continued education after graduation would be very beneficial particularly preschool teachers who can potentially identify gifted children at younger ages.

**Keywords:** giftedness, preschool, teacher candidates, teacher education

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## Early Childhood Care and Education Policy Research within the post-2015 Sustainable Development Framework

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As per growing literature, cognitive, social and emotional experiences in early years shape the architecture of child's brain, and have a lasting impact on his/her lifelong achievement including school success and emotional stability (Shonkoff & Philips, 2000).

Early Childhood Care and Education (ECCE) can mitigate the impact of social and economic adversities on young children, and help them develop their full potential (Engle, et al., 2011). Yet, most children, especially disadvantaged ones, have no or little access to ECCE services (UNICEF, 2012), which contributes to growing "equity gap" between rich and poor in early years. Increased investment in ECCE is a "must" for scaling up quality services and reaching the most disadvantaged (Heckman, 2006) (Behrman & Urzua, 2013).

The major purpose of this paper is, therefore, to explore *why* there is an urgent need for an evidence-based policy advocacy, and *how* it helps placing ECCE on national and international development agendas and in their investment plans.

### **Method:**

The paper is a literature review of scientific research, international policy papers, conventions, declarations, and respective UN resolutions in the area of early childhood development, care and education. The time-span of the review extends from Education for All (EFA) Conference in 1990, to current discussions on UN post-2015 Sustainable Development Framework (UN, 2014).

### **Findings:**

Early Childhood Care and Education (ECCE) was an important component of the Education For All (EFA) in 1990. Recognizing the fact that "*learning begins at birth*", EFA Declaration for Action urged to develop comprehensive ECCE programs for all (UNESCO, 1990). Dakar Framework for Action in 2000 made ECCE first of the six EFA Goals by 2015 (UNESCO, 2000). However, EFA Global Monitoring Report-2007 stated that the most disadvantaged children had the least access to ECCE services (UNESCO, 2007). In the same year, the Lancet Papers on Early Childhood Development, estimated that over 200 million children under age 5, are at risk of not developing their full potential, due to poverty, poor health and nutrition and denied access to quality early childhood care and education programs (Engle, et al., 2007; Grantham-McGregor, Cheung, Cuerto, Glewwe, Richter, & Strupp, 2007). Investment in ECCE, though brought high financial returns, was the lowest in almost all countries (Heckman, 2006). Hence, it is getting clear that stronger advocacy for placing Early Childhood Development (ECD) at the center of global development frameworks is an imperative for increased financial investment in, and equitable access to ECCE (Britto, Ulkuer, Hodges, & McCarthy, 2013).

Currently, Global Development Community is shaping the post-2015 Sustainable Development Agenda (United Nations, 2012), and has identified seventeen Sustainable

Development Goals (SDG) for the next fifteen years. ECCE is included as a “target” under Education (UN, 2014). Such promising progress brings new challenges such as “implementing” ECCE targets within the forthcoming global Sustainable Development Framework.

### **Conclusion and Recommendations:**

To keep the ECCE on the SDG’s “implementation” framework, there is a need for a *policy research* that becomes an integral part of implementation processes nationally and internationally. ECCE Researchers have a role to play in re-framing their research questions around *issues and challenges* that sustainable development policies should address.

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# The Education Models Developed For Bilingual Children In Early Childhood Period<sup>11</sup>

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The status of being bilingual or multilingual is increasingly widespread around the world because of reasons such as transnational migration, tourism, studying abroad, marriages of people from different nations along with the minorities that are found in almost all countries (Yazıcı ve İltter, 2008, s. 58). To understand the effect of today's multi-cultural and multilingual world on the education system and children, different educational models should be created and implemented and the outputs have to be evaluated and discussed. It is believed that the worries regarding the negative results that carried by not determining any policy and education model for those children who has different cultures and whose first language is different than the school language are also valid for our country. Therefore researching education models that may constitute an example for our country and that will support the language development of bilingual children form the purpose and the significance of this study.

## Method

Amongst the qualitative research methods, document analysis has been embraced in this study and both literatures concerning the education models applied in different countries have been reviewed and information have been gathered from different databases.

## Findings

In light of this information, six different education models which basically are divided into two as 'bilingual education models' and 'monolingual education models' applied in different parts of the world are set forth. It is considered that these models will comprise a resource for educational policies to be determined for the bilingual children in our country.

## Conclusions and Suggestions

Transforming negative prejudices prevalently observed about bilingualism into an understanding of respect to the different through accurate briefing via the visual- print media and social media might be suggested as a way to follow. Since Bilingualism is not restrictive as believed but contrarily has enabling features, approaches intended for providing education to children with more than one language have to be supported (Ayan Ceyhan ve Koçbaş, 2009, 32). A language rich environment should be regulated for young children (Extra ve Yağmur, 2013). Furthermore it is considered essential to do and share researches concerning bilingualism, bilingual education and language rights.

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<sup>11</sup> This paper has been prepared based on the master thesis of G. Esra Korkut.

**Keywords:** Bilingual Education, Multilingual Education, Multiculturalism, Early Childhood Period, Educational models

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# **A Comparison of Turkish and American Children's Illustrated Story Books**

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The story books have been documented to be effective on child development beginning from the infancy (Dwyer & Newman, 2008, Jalongo, 2004). There is a variety of children's illustrated story books sold at the market. However, parents, teachers, and administrators need to take some criteria into account while choosing the right books for young children (Gooden & Gooden, 2001; Levenstein, Levenstein, & Oliver, 2002). The quality of children's book affect the reading process of teachers and parents and in turn children's learning capacity (Senechal, Cornell, & Broda, 1995). Besides, the young children learn the social expectations and socialize in accordance with the personality characteristics of their gender determined by the society and the story books play an important role in presenting the role models to the children. According to Easley (1973), the preschooler's favorite picture books have an enormous impact on their sexual identities. Hence, the gender role models and societal values are presented to the young children via the story books, and the socio cultural values of societies are depicted in the story books. Thus, the purpose of this study was to compare the illustrated children's story books used in the American and Turkish preschools according to their interior and exterior features and determine the differences specific to each culture and discuss these findings from an educational and social perspective.

## **Method**

### **Design**

This study is conducted as a comparative mixed method design. The selected books were compared according to their interior and exterior features with an instrument composed of likert type and open ended questions.

### **Participants**

A total of 50 books were analyzed in this study. 25 books were chosen from five different preschools located at the city center of Erzincan, East Anatolian Region of Turkey and the city center of Denton, Texas, U.S.

### **Data collection tools**

In this research, the interior and exterior features of picture books were evaluated with an instrument developed upon the prior research (e.g. Al Otaiba, 2004; Demircan, 2006). The instrument was developed by the researchers and submitted to a panel of three experts of whom one was professor in the literature and two were professors in the early childhood education. Other than the quality aspects, the books were analyzed according to the

representation of the gender roles and personality traits attributed to the characters both in the texts and illustrations.

### **Data Analysis**

The second and third author collected the books from the preschools upon granting permissions and analyzed them according to the interior and exterior features. The researchers also scanned and typed the whole books and sent to each other and to the first author for the analysis. Hence, each book was independently analyzed by three researchers.

### **Findings**

The researchers checked the books according to their internal and external features. The internal features included wording and literary style, subject, planning, theme, and the external features included dimension, paper, cover, binding, illustrations, page layout, and identity information. The gender representations and the personality traits of characters were analyzed through the text and illustrations.

### **Conclusion and Recommendation**

In conclusion, some differences were observed between Turkish and American illustrated story books. Generally, the similar guidelines were used for the exterior features of the books for each group. The gender representations illustrated in the books and the personality traits attributed to the characters were dispersed on the male/female dichotomy which were similar for two groups of story books.

**Keywords:** cross cultural study, gender roles, picture books, young children

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## **The Present and Past of Family Involvement in Preschool Education Programs of Ministry of Education**

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In order that the education to be given at school, it is necessary that families be given more importance and be in positive contact with them. Informing parents through family supporting programs, making them attain new skills and giving a service of consultation would improve the intrafamilial relation dynamics and also the development of the child. Therefore, making families participate in preschool education is of great importance in training them over child development and education. While determining the objectives of education, it is required that the child should not be considered alone and a cooperation between school and family be obtained for a preschool education and parents be included in the education (Kaya, 2003); since however well the preschool education programs are prepared, they will not be so effective unless they are supported by families. In addition, the role of family is one the components of the program and has a complementary quality in the program. Several researches were carried out with regard to Ministry of Education (ME) preschool education programs. However, it is thought that studies regarding the place of family involvement in the program are in particular limited number (Genç, 1997; Çaltık, 2004; Cömert, 2004; Gündoğdu et al., 2008; Yazar, Çelik and Kök, 2008).

In this context, the purpose of the current study was to investigate the place and importance of family involvement studies in ME Preschool Education Programs. In this sense, the preschool education programs in the Board of Education, course books in preschool educational programs published, related researches and articles were examined in order to gather data. In the data obtained, the place, purpose of family involvement studies in the preschool education programs released by ME in pre 1994, 2002, 2006 and 2013 were determined comparatively in terms of years.

Family education was given in the 1952 Program of ME for the first time. However, it is likely to say that the leading steps with regard to preschool education in Turkey was initiated after 1960. With the constitution of 1961, the protection of child was made a must. Seventh National Education Council gathered in 1962 explained the necessary services to be given over preschool education. In 1962, first “Kindergarten Regulation” was released for the first time (Milli Eğitim Şuraları, <http://ttkb.meb.gov.tr/www/suralar/dosya/12>). General Directorate of Preschool Education was established with the law No 3797 with regard to Ministry of Education, Organization and its Tasks.

Preschool education program was firstly issued in 1994. With the issue of the program, it was seen that family involvement was included in the program. The following year, in 2002, the family involvement studies were included in the program with its varieties. Some explanatory information under headings like “*Making Families Involve in Child’s Education*” (ME, 2002). In particular, it was pointed out that teacher should make home visits at least once in a semester. Depending on this program, parent meetings should be made twice a semester at least.

The program of 2006 had a quality of the one in 2002, while family involvement studies were given in more detail with examples. In this program, family involvement, family training activities, family communication activities, involvement of families in educational activities, home visits, activities likely to be made at home, individual interviews and meetings, involvement in management and decision making processes were the main headings of the program (ME, 2006). The biggest difference compared to earlier years was that ME 2013 Preschool Education Program, Family Support Program integrated with Preschool Education Program (OBADER) and Family Support Program integrated with Educational Program for 0-36 Month-Old-Children (EBADER) were issued and made a separate guide book (ME, 2013).

At the end of the study, it was found that family involvement study have been given in ME Preschool Education Programs in detailed as years passed, and the importance given has increased. In particular, it was pointed out that the family involvement studies were given in 2013 program in detail. However, the desired level has not been achieved in the application dimension even though family involvement studies were given in detail in the program. It is likely to carry out practical studies in the course of parent education that take place in the Preschool Education Undergraduate Program taught in Faculty of Education. Some in-service education courses could be arranged in such issues as the planning and practicing family involvement for the teachers working in preschool education institutions.

**Keywords:** Preschool Education, Preschool education program, Family involvement

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# Examining Interpersonal Problem Solving of the Children Age 4-5 And Preschool Teachers' Responsibilities

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The study was conducted with the aim of examining interpersonal problem solving skills of the children attending to the preschools and to determine the preschool teachers' responsibilities at this point.

## Method

The population of the study planned as a survey model is formed by 4-5 year-old children who attend independent pre-schools in towns which have at least 5 dependent pre-schools at city center of Ankara in academic year of 2014-2015.

The sample group of the survey was identified based on the method of stratified sampling. The rate of the number of children who attend independent pre-schools in towns was identified and accordingly 36 from Altındağ, 19 from Mamak, 36 from Çankaya, 69 from Etimesgut, 37 from Keçiören, 27 from Sincan and 41 from Yenimahalle; 265 children in total are included in the sample. Schools which the survey shall be performed in towns were identified randomly and the survey was performed in 3 schools from each town, in 21 schools in total.

In order to identify the abilities of children to solve interpersonal problems, 'Preschool Interpersonal Problem Solving Test', which was developed by Shure (1974) and adapted to Turkish by Dinçer (1995) was used. This test evaluates preschoolers' abilities to think alternative ways related to interpersonal problems. The test consists of two parts. In the first part, short stories which describe problems between two peers are told to the child. In the second part, short stories which describe problems between child and mother are represented. Data was collected between the dates of December 2014 and March 2015. The schools included in the sample were gone and an appropriate environment was prepared. Children were individually taken from their classes and data collection was performed by the researcher who had taken test's application training.

The evaluation of the test was performed based on the instructions and suggestions in the original booklet and all data were loaded to SPSS 15.0 program. Based on the sub-problems of the survey, whether data were normally spread or not was tested and it was confirmed that they were spread normally. Therefore, independent samples t test were used in comparisons with two groups and single factorial variance analysis test was used in comparisons with three or more groups. In order to identify in which groups the difference exists, post hoc- multiple comparison test was conducted.

## Findings

Abilities of 265 children included in the survey to solve interpersonal problems differ significantly statistically based on their ages, the duration which they attend pre-school, and ages of their mothers ( $p < 0,05$ ). The point averages of 5-year old children are more than that of 4-year old children. Moreover, it was stated that the point averages of children who have attended pre-schools for two years or more are more than that of children who have attended for less than two years. It was observed that the point averages of children whose mothers are 31-35 years old are more than that of children whose mothers are younger than 30. It was observed that genders of children, whether they have siblings or not, educational backgrounds and professions of their parents, durations which children watch TV, whether they are elementary family or extended family do not significantly statistically make a difference on the points of solving interpersonal problems ( $p > 0,05$ ).

## Results

According to the data collected from the survey, it was observed that 5 year-old children, children who have attended pre-schools for two years or more and children whose mothers are 31-35 years old found more alternative ways of solving interpersonal problems compared to respectively 4 year-old children, children who have attended for less than two years and children whose mothers are younger than 30. As long as age and the duration of attending pre-school increases, variation of problem solving abilities of children can be explained with experiences which they have had. Creating opportunities related to problem solving in educational environment and being able to lead children on this issue by looking at these opportunities can be considered as a factor which enhances children's complement (Dinçer, 1995; Youngstrom, 2000; Dinçer ve Güneysu, 2001).

It was stated that genders of children, whether they have siblings or not, educational backgrounds and professions of their parents, durations which children watch TV, whether they are elementary family or extended family are not effective factors to find alternative ways of solving interpersonal problems.

## Suggestions

Children who are provided problem solving opportunities discover and develop their talents. While these children solve problems, they use their knowledge, skills, understanding and needs. These skills expedite the development of children's self-esteem and self-confidence. Therefore, it is very important that there should be critical adults for example parent, teacher etc. in a child's life who thought problems as opportunities and valuable learning processes (Bingham, 2004). Therefore, creating environments which support children's abilities to solve interpersonal problems in home environment and school environment, and supporting these adults on creating educational programs can be seen as an important factor. So, abilities to solve interpersonal problems can be developed by starting from 4-years old and by integrating with educational regulations which continues during adulthood.

**Keywords:** interpersonal problem solving, preschool teachers' responsibilities, children

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# **The Relationship between Attachment Dimensions and Classroom Management Profiles: An Investigation with Preschool Teachers<sup>12</sup>**

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Attachment theory is regarded as a critical element for understanding interpersonal relationships. In recent years there is a growing body of evidence that suggests attachment theory may play a behavior and relationships of workers in the workplace (e.g., Littman-Ovadia, Oren, & Lavy, 2013).

However, these researches have been limited in educational settings. Finding out the relationship between attachment dimensions (attachment anxiety and attachment avoidance) and classroom management profiles (tolerant, exhausted, caring, inflexible and democratic) constitutes the general purpose of the present research. In order to reach this aim, answers have been sought for the following questions: Is there any significant difference regarding attachment dimensions of the preschool teachers in terms of marital status? Is there any significant difference regarding classroom management profiles of the preschool teachers in terms of marital status, age, experience in teaching and educational background? Is there any relation between attachment dimensions and classroom management profiles of preschool teachers? Relational survey design was used in the study.

The study was conducted with 230 preschool teachers working at early childhood education classrooms in Kırıkkale province during the school year of 2013-2014. They were selected through random sampling technique. The three measuring tools used for this study were Personal Information Form which was designed by the researchers themselves to identify the demographics (age, experience in teaching, educational background, marital status) of the preschool teachers, Experiences in Close Relationships-Revised (ECR-R) (Selçuk, Günaydın, Sümer & Uysal, 2005) which measures adult attachment dimensions, Classroom Management Profiles (Akman & Umay, 2007). Data were analyzed using SPSS 20. The independent t-test, Pearson's product-moment correlation coefficient, ANOVA and Scheffe test were used for data analysis. Significance was set at a minimum of .05, while other significance level .01 was also shown.

As a result of t test, a significant difference was not found between attachment dimensions and marital status of preschool teachers ( $t= 1,529, p=0,128>.05$ ). The findings demonstrated that classroom management profiles of preschool teachers differ in terms of marital status, age, experience in teaching and educational background. In relation to marital status, inflexible classroom management profile significant difference occurred in favor of single preschool teachers ( $t=-2,227, p=0,024<.05$ ). In relation to age, exhausted classroom management profile significant difference occurred in favor of younger preschool teachers

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<sup>12</sup> This research is a part of first author's doctoral dissertation.

( $p=0,000<.05$ ). This findings support previous studies younger teachers may have more problems about classroom management than olders (e.g., Evertson & Weinstein, 2006).

It was found that significant difference between educational background of the preschool teachers and exhausted classroom management profiles. According to the results of Scheffe test applied to find out between which groups these differences are, we can state that this difference lies between the group who graduated from open university and the other two (bachelor's degree and master degree) ( $F=18,327$ ,  $p=0,000$ ;  $p<.05$ ). Preschool teachers who graduated from open university have the highest range among the others.

It was found that significant difference between experience in teaching of the preschool teachers and all classroom management profiles (tolerant,exhausted,caring,inflexible and democratic) ( $F=12,92$ ,  $p=0,000<.05$ ;  $F=14,21$ ,  $p=0,000<.05$ ;  $F=13,77$ ,  $p=0,000<.05$ ;  $F=22,64$ ,  $p=0,000<.05$ ;  $F=18,34$ ,  $p=0,000<.05$ ). According to the results of Scheffe test applied to find out between which groups these differences are, we can state that veteran preschool teachers have the highest range among the others. This findings are consistent in accordance with previous studies (e.g.,Cunningham, Zibulsky, Stanovich, & Stanovich, 2009).

Positive correlation was found between attachment anxiety and exhausted classroom management profile of preschool teachers ( $r=0.329$ ,  $p<.01$ ). This finding of the present research supports the finding of Hazan and Shaver (1990)'s study. They found that anxious attached individuals show low performance in workplace. On the other hand, anxious individuals, expect to be undervalued by coworkers (Hazan & Shaver, 1990) and are anxious about relationships at work and job performance (Hardy & Barkham, 1994). This finding may reflect anxious individuals' fear of rejection, which make it difficult for them to feel more emotionally committed. Positive correlation was found between attachment avoidance and caring classroom management profile of preschool teachers ( $r=0.191$ ,  $p<.01$ ). Hardy and Barkham's (1990) research finding can supports that of the this result. They found that avoidant attached individuals could be ambitious in workplace. In literature,it was said that avoidant individuals have work oriented attitudes (Hazan & Shaver, 1990). However, avoidant individuals also exhibit more conflict with others and more relational difficulties outside of work (Hardy & Barkham, 1994), this situation may be support their work performance without relational concerns.

In conclusion, the current study was designed to add to the limited body of literature regarding the relationship between adult attachment dimensions and classroom management profiles. Further studies should also employ qualitative or mixed research methods to study the relationship between attachment dimensions and classroom management skills in different educational settings.

**Keywords:** Attachment anxiety, attachment avoidance, classroom management profile, preschool teacher

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# **The study of Preschool Children's School Adjustment according to Some Variables**

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The preschool period is an important process that can affect a child's future. Studies have shown significant differences between children who take or do not take preschool education in the listening skills and the children's school adjustment (Ensarand Keskin, 2014; Erdoğan and Şimşek, 2014; Topçu, 2012; Yeşil, 2008). Children are supposed to adopt to school at first in order to benefit from preschool education, as it has been shown in studies.

School adjustment could be defined as the child's social and academic benefit from the settings in which he or she is immersed. There are various factors affecting adjustment to school. These factors could be classified as the child's temperament, family-oriented factors, and school-oriented factors. The qualities of the educational setting, family involvement, or the teacher's efficacy are among the factors that have a significant effect on the quality of the education. Moreover, recognizing a child's personal qualities, and taking these qualities into the consideration when designing educational environment and activities are crucial. The factors such as a child's temperament, level of anxiety, and self-esteem could affect a child's school adjustment and his/her success in preschool education. It is important to identify the factors that affect preschool children's school adjustment for the activities which support and facilitate the adjustment.

This study aims to investigate the relationship between preschool children's adjustment to school and the variables that orient from the child's temperament, self-esteem, sex, age, attendance at school, and having siblings.

The relational screening model is used in this study, and there are 200 children who are from 48 to 72-month-old preschool students and are student at an independent pre-school in Çankaya district in Ankara, Turkey.

In order to gathering data The Teacher's Evaluation for School Adjustment Scale (Önder and Gülay, 2010), The Short Temperament Scale for Children (Yağmurlu and Sanson, 2009), Cassidy Puppet Interview Form (Dikici, 1998) and Demographic Information Form were used. The t-test, Pearson's correlation coefficient, variance analysis and multiple regression analysis were used so as to analyze the test for the goals of the research.

According to the results of the study, there is a significant difference in the subdimension of general adjustment, self-management and school adjustment scale for cooperative involvement in favor of the female student; moreover, there is a significant difference in the subdimension of general adjustment and cooperative involvement in favor of older students. While it is found out that there is a meaningful difference in the duration of school attendance in the

avoidance of the school which is the subdimension of the school adjustment scale, there is no significant difference in the school adjustment scale's scores from the perspective of having or not having siblings. There is a positive correlation between the rhythmicity, a subdimension of the Short Temperament Scale for Children, and self-management, which is a subdimension of the adjustment to school scale. Likewise, there is a positive correlation between preschool children's general self-esteem scores and the adjustment to school scale's sub dimension of self-management scores. The percentage of preschool children's adjustment to school and their temperament features and self-esteem levels of adjustment to school's interpretation is 3%. This rate is considered to be quite low. In the other word, it is possible to say that there are some other effects of variables which are different from the variables of temperament and self-esteem. In order to increase the school adjustment, it could be recommended the supportive activities with the participation of all responsible adults for school adjustment before they start preschool education. Moreover, teachers can be taught of the features of temperament and their effects on the children's behaviours, self-esteem, and school adjustment through the teachers' in-service trainings. This study is conducted on 48 to 72 month-old preschool children. It is very common to study on these ages. Therefore; it is recommended the similar studies for 36 to 48 month-old children as well. In addition, it is suggested having longitudinal studies on school adjustment and conducting contrasting studies on various variables such as socioeconomic level, family attitudes, characteristics of teacher and school, and making use of various sources of information like observation and interviews.

**Keywords:** School Adjustment, Child's Temperament, Self-esteem, Preschool.

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# The Things that Children Don't Want to See at School Playground

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## Introduction

The main task of preschool institutions is to provide qualified educational environment for children and also to supply materials and environment which children need for learning. At the same time, providing equality of opportunity in education to children from different socioeconomic levels and preparing them for primary school are considered as significant purposes of preschool education (MEB, 2002; 2006; 2013). All environments presented to children will have positive or negative impact on children's development and education. While an environment which is designed in line with good, right and intended features will contribute to children's all developmental domains, it's possible to say that an environment which is badly designed has negative impact on children's development. (Acer, 2014, p. 228). Furthermore, children's participation in the organization of the environment is significant in terms of adopting democratic approaches and helping children embrace their environment. That's because it is the only possible way for children to benefit the environment (Hart, 1997, p. 39,44).

Because children spend a lot of time at school playgrounds, it's crucial that school playgrounds are designed in accordance with children's needs and have sufficient equipment as is the case with schools and classrooms. Activities done at school playground are important as much as activities done at classrooms. That's why school garden shouldn't be seen as an area only for running and jumping (Bilir, Arı, Gönen, Üstün and Pekçağlayan, 1998; Öztürk, 2009; Zembat, 2001, p. 20).

## Aim

This research is aimed at determining the materials and environments which children don't want to see at school playground and make them irritated.

## Method

This study is a qualitative research that aimed to determine the present situation based on the interviews. Study group included 120 children who continued their education at 6 different school's kindergartens from low, middle and high socio-economic levels in Ankara during 2012-2013 academic year in spring term.

## Findings

Small number of children from low socio-economic level at school A responded to the question regarding the things they don't want to see at school playground. They stated the

things they don't want to see as "pollution and garbage". When they were explaining the reasons, they said that "we become sick", "I don't like dirty places".

The statements of children from low socio-economic level at school B are as below:

- *Iron*: "Balls hit them and then explode" (...) In addition to that statements, "*spider, pollution; dirty, unclean areas; garbage; stone; naughty children; car; slide and animals*" were also stated by children as the things they didn't want to see at school playground.

The statements of children from medium socio-economic level at school A are as below:

- *Book*: "There shouldn't be books; because when it rains, they tear. But if they don't tear, then there can be books." and in addition to that statements, "*thief; dirty, unclean areas; garbage; rabbit; bread crumb; stones; bee; ant; glass; tree and narrow place*" were also stated by children as the things they didn't want to see at school playground.

The statements of children from medium socio-economic level at school B are as below:

- *Tree*: "When there are trees, I can't play comfortably. Because when there are trees, it can't be a huge space" (...) and "*toys; dirty, unclean areas; garbage; bee; insect; spider; ant; dog*" were also stated by children as the things they didn't want to see at school playground.

The statements of children from high socio-economic level at school A are as below:

- *Bee*: "Because their needles can sting."
- *Snail*: "I don't want snails, because they contaminate snot everywhere" and "*Ant; insect; spider; naughty children; dirty, unclean areas; garbage*" were other things children didn't want to see at school playground.

The statements of children from high socio-economic level at school B are as below:

- *Sound, noise etc.*: "I don't want children to scream, because children who study can be disturbed." (...) Also "*bee, dirty, unclean areas; garbage etc., insect; height*" were stated by children as the things they didn't want to see at school playground.

When looking at the things that children didn't want at their school, it is seen that common items in every group are "*dirty areas, garbage and pollution*". Clean environment, clean and steady toys at playground are important for children from all socio-economic levels.

## **Results**

General overview of the results show that it was identified that pollution and garbage are the most disturbing features at the school playground for children. It was seen that children could tell what they don't like by considering the school playground they actually have. In other words, children put forward that their schools' playground doesn't meet their desires.

## **Suggestions**

When organizing school playgrounds, the things that children do not want to see should put into consideration as much as the things that children want to see. Because children are active users of school playgrounds, necessities should be determined in terms of not only for adults but also children. It is suggested that school playgrounds should be planned as clean and organized places where children can be active and play outdoor games freely.

**Keywords:** Kindergartens, School Playground, Environment

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**THEME 12:**  
**Trends in Arts, Drama and Museum Education**

# **The Effects of Rhythmical Articulation Skills of Primary School Teachers Candidates on Playing Instrument Skills**

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Researches have proved that musical activities such as playing, singing, hearing, creating music enhancing physical, emotional and social development (Kocabaş, 2013). In recent years researchs which were done directly or indirectly on music education with multiple intelligence, constructivist approach, brain adopted learning have attributed a special functions on music. Specially, music education that is keeping on from preschool education to primary school which is known it's contributions on students cognitive, emotional, social and psychmotor development have drawn an attention for primary school teacher candidates' musical skills (Kocabaş, 2003; Küpana; 2013). In primary school years a student/ a child should be aware of musical elements and primary school teachers qualifications have been gained an important role (Koca & Kurtasan, 2013 ). Because in the primary school class room music courses is being given by the primary school teachers (Kocabaş & Selçioğlu; 2003). Rhythm training is one of the significant dimension of the music. Orff, Kodaly, Dalcrose methods are the rhythm based methods which suggested by a lot of musicians (Lament, 1976; O'Brien, 1983; Dündar, 2003). Music teaching activities that based on rhythm facilitates learning music and instrument playing skills. In this contex the aim of the research was to determine the effects of rhythmical articulation skills of primary school teachers candidates on playing instrument skills in instrument supported music courses, who will be responsible from teaching music courses as well as other domains in teaching.

## **Materials And Method**

This study was an ex post facto (Büyüköztürk, 2005) research which has been investigated the effects of rhythmical articulation skills on playing instrument skills. In the research design Teacher Candidates were grouped according the rhythmical articulation and playing instrument examination timing. The Sample of the study have composed from teacher candidates who were student in 2013-2014 education year Fall Semester in Music Course ( n=470 formal and second programmes) and keeping on their educations in 2014-2015 Fall Semester in Dokuz Eylül University Faculty of Education Division of Primary School Teacher Education ( n=123 only formal programme) as totally 593. First group was evaluated firstly rhythmical articulation skills and three weeks later playing instrument skills, second group was evaluated rhythmical articulation skills as soon as playing instrument skills. Data were collected with Observation Form of Rhythmical Articulation Skills and Observation Form of Playing Skills developed by researcher. Correlation coefficient was found to be 0.86, for Observation Form of Rhythmical Articulation Skills and 0.93 for Observation Form of Playing Skills. Obtained data were analyzed by SPSS 15.00 package programme by frequency, percentage, t -test, means, one way anova, correlation, regression analysis.

## **Findings**

There were significant differences according to gender between male and female candidates in terms of instrument playing skills in the two groups. 2013-2014 Education Year Teacher candidates were evaluated for their instrument playing skills three weeks later than their rhythmical articulation skills. The predictions of instrument playing skills level by their

rhythmical articulation skills level was found to be low and not significant. But 2014-2015 Education Year Teacher candidates whose firstly their rhythmical articulation skills, shortly after instrument playing skills were evaluated. The correlation coefficient between two measurements was found to be  $R=0,73$  and prediction coefficient  $R^2=0,53$  was found as middle level and significant. It meanted that %53 of instrument playing skills were explained by rhythmical articulation skills. There were significant differences in rhythmical articulation skills and rhythmical articulation-Instrument playing skills in terms of gender in the second group. Female candidates rhythmical articulation and playing instrument skills means were found higher and meaningful than the male candidates'. But according to instrument types there were no meaningful differences .

### **Conclusion**

As a conclusion it can be said that rhythmical articulation skills has supply important clue for retention of melody before playing an instrument.

### **Suggestions**

Based on this research it can be suggested frequently playing an instrument skills supported by rhythmical articulation skills in general music course implementations and evaluations. Similar researchs should be done to develop music and teaching music course in the primary school teacher education programme.

**Keywords:** Primary school teacher education, teaching music, teaching instrument, rhythmical articulation.

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# **Semiotics in the Future of Art Education**

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Today's world has more visuals than ever before. The visual culture establishes itself firmly through imaging technologies. It also becomes more widespread and gains a foothold in the general global culture. The new generation encounters images of ideology and visual culture everywhere. These images influence their perception of the world and shape their thoughts as well as personalities. Most of the time, they are unable to interpret or are critical of these images. Visual culture has also begun to influence and transform works of art and the qualitative foundations of aesthetic perception. Artists have widely started to use visual culture and media in their creative processes. We are now at a point where we cannot think of the concept of art as separate from visual culture due to these disappearing boundaries between products of visual culture and art. These developments have also had an impact on art education and art criticism. Institutions providing art education as one of their defining principles must educate students in such a way that they can analyze the products of visual culture and decipher the meanings and messages transmitted within. There is a need to acquire an understanding of what we see around and how these perceptions affect our learning and communication. In recent years there has been a qualitative increase in research aimed at visual culture. And in the field of education, the qualitative increase in semiotic pedagogy and semiotic studies is especially noteworthy. Semiotic studies are based on how meaning is made, and reality is represented. It can play an important role in rethinking the learning and teaching processes. Contemporary art education uses many tools of semiotics in an interdisciplinary context to explore how visual signification influences our lives.

## **Purpose of Study**

In this study, the contributions of semiotics and its place in art education will be investigated.

## **Method**

### **Research Model**

Descriptive research using a screening model.

### **Gathering Data**

Data was gathered using written sources, established literature and internet searching techniques

## **Conclusion and Suggestions**

The relationship between education process and semiotics was examined in this study. It was determined that 'semiosis' and 'collateral experience' underpinned by Peirce's definition of sign have a significant place in the education process, and semiosis and collateral experience process is related to the concept of lifelong learning. It was acknowledged that the semiotic approach is a suitable method for analyzing the meaning of today's works of art in which the conceptual dimension come to the forefront. The messages and meanings transmitted to us by the visual culture may also be uncovered systematically using the methods of semiotic. Performing analyses with semiotic method in the work of art examination process during art

education is associated with collateralexperience. This study concluded that the semiotic approaches presume the object they examine to be a structure consisting of various levels. This structure is separated into various levels in a systematical manner with methods used by semiotics. In this way, the organization style of the structure (work of art, visual culture products) and articulation of meaning is also revealed. Students applying semiotic method in their analysis of works of art and visual culture products in art education also learn how to analyze the structure in a systematic manner.They will also have an opinion about deconstructivist approaches forming the intellectual basis of today's works of art. Engaging with the semiotic method will allow art students to question the meaning of contemporary art practices, which contain elements from everyday life and visual culture. Lastly, this study conveyed that the use of semiotic method in art education not only teaches art students how to decode works of arts, visual images but also shows students how to engage their life experiences with the images they have seen in order to build deeper understandings and develop their own critical thinking abilities.

**Keywords:**Art education, semiotics, semiotic pedagogy, visual culture.

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## **Evaluation of the Views with Regards to Cognitive Skills of 3rd Grade Students within the Scope of Museum Educational Practices<sup>13</sup>**

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The purpose of this paper is based on students' views, to assess the implementation of an educational package prepared to be applied during visits to Ankara PTT Stamp Museum to develop 3rd grade students' creative thinking, critical thinking, research and reasoning and problem solving abilities.

Pertinent to this purpose, responses for following questions have been examined:

1.For Primary School Third Grade programmes;

What is the role of ctitical thinking, creative thinking, research and questioning aptitudes as well as problem solving aptitudes?

2.What kind of training workshop can be done about basic skills of third grade students related to critical thinking, creative thinking, research and questioning skills and problem solving during the visit to the museum?

3.What are the students' view on the museum education package prepared for third grade students?

Turkish Educational System has been going through new restructuring since 2005 to be redifined and transformed into information society based on shifting new world paradigms. Enabling individuals to acquire the skills to analyze, think critically, provide different solutions and solve problem as expected of 21 century individuals is one of the targets of Turkish education system, and therefore the national education system attaches a priority to museum education in elementary schools. Furthermore, these skills to be developed in students are indicated as one of the eighth skills targeted in the elementary programme of MEB 2008.

It has been considered that education package to develop third grade level thinking skills such as creativity, critical thinking , research and questioning as well as problem solving is beneficial to pave the way for a multi-disciplinary learning platform.

Three main themes has been set to apply in museum training package for the purpose of assessing students views on their thinking skills towards Ankara PTT Stamp Museum.

First Theme: Ankara Ptt stamp Museum/ Communication Tools

Second Theme: Ankara PTT Stamp Museum/ Thematic Stamps

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<sup>13</sup> This research has been prepared under the guidance of Prof. Ayşe Çakır İlhan as a requirement to complete Ankara University Social Sciences Institute Interdisciplinary Museum Education Department graduate programme without thesis.

### Third Theme: Ankara PTT Stamp Museum/ Foreign Countries Stamps

Achievements has been defined according to the subject of each theme and thinking skills and activities have been developed according to these achievements . Activities have been planned for each themes at three different stages, namely before the museum, during the museum and after the museum.

This research has been applied to total 20 students, of which 8 were male and 12 were female students at the ages of 8 and 9 in the third grade of Ankara University Development Foundation Private school as 18 lessons before the museum, during the museum and after the museum. In addition to basic educational method and techniques, creative drama style and techniques have been heavily used during this study.

This research was prepared based on screening model. The reason a screening model is to assess the views with regards to one of the basic thinking skills used in the museum training. "Screen models are the approaches targeting to describe existing or past situation as existing or a happening incident. The incident, individual or object and subject of the research is defined in its own condition as it stands. There is no effort what so ever to change or influence those. There is something which needs to be known and exists there. The matter of the fact is to determine those in its own condition through observing." (Karasar, 1994).

For the evaluation of this research, students' views and 40 minute video records for each session has been analyzed. In this study the assesment has been done with the "Pre Museum Education Assesment Scale," which was prepared based on expert views from researchers, student idea forms, which were prepared through considering definition of skills indicated in Ozden (1997) and MEB (2005), the product portfolio file assessment scale" (İlhan Aktar Okvuran and Karadeniz, 2011)" developed to evaluate participants (potfolio) files as well as comprising students works and implementation videos. " Pre Museum education assessment forms", which is one of the first forms of those, contains open-ended questions regarding participants' current knowledge and thoughts about the subject. Participants were asked to write down their thoughts without any concern to these forms. "Students views form" is the form to assess effectiveness of thinking skills in museum education package activities. Thinking skills participants acquired after the activities for the three themes are assessed with these forms. The last form is "portfolio file assesment scale" form which helps to understand participants learning levels through assesing the whole museum education experience. In the assesment of datas, frequency analysis and the percentage calculation has been used. According to the result of this study, it is determined that museum education practices have positive influences on students' cognitive skills. Therefore, it is advised that this museum education practice may use in schools and museums.

**Keywords:** Museum Education, Critical Thinking, Creative Thinking , Research and questioning Skills and Problem Solving Skills.

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# Structured Creative Drama Program In The Development Of Communication Skills

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Planning is essential in creative drama groups in order to obtain an efficient and effective result. Thus, the leader is required to do a detailed planning before starting a group (Northen and Kurlant, 2001). However, implementers frequently neglect the stage of planning or do it without caring, which may be due to their ignorance of the importance of planning or the sense of pressure to start the group (Fehr, 2000). However, a complete planning will bring along the success of creative drama.

## 1. Stage of Planning and Forming the Group

The stage of planning includes the theoretical basis of the group and communication skills, general objective of the group, objective and basic assumption of the group in question and the selection of group members.

### 1.1. Theoretical basis of the group and the reason for its foundation

In general, people get involved in a group in order to meet their needs such as avoiding being alone, getting information and having fun (Duyan,2007). Before starting a group, a leader should seek a clear and explicit answer to the question “why” she/he is doing this.

Efficient communication skills and empathy enable relationships in all kinds of human affairs and professional areas. Egan (1994) emphasizes the efficiency of the development of these skills in those working in all professions that require to be involved in society. Psychiatrists, psychologists, psychological counselors, social service experts, physicians, nurses and teachers are involved in this group (Korkut, 2005).

Drama processes give us the opportunity of frequently using all elements of communication. All types of creative drama activities are based on verbal and non-verbal communication. There are studies asserting that creative drama increases the communication skills (Akoğuz, 2002; Bayram, 2001, Kara and Çam, 2007).

### 1.2. Determining the objective of a group

Even though they are separated according to their types, the most important element in planning is to determine the objective of a group (Kağnıcı,2011). Based on this assumption, the group process aims to increase the communication skills of group members and the interpersonal communication skills of group members in the educational group.

### 1.3. Selection of group members

#### *a. Announcement of the group:*

The group announced that the creative drama course would be opened for first graders at the end of the fall term of 2011-2012 and the students were given information.

### ***b. Member number and features of the group***

The ideal group number depends on many factors like the age of members, experience of the leader, type of the group, subjects that are planned to be handled in the group, duration of each session and the physical environment where the group takes place, and one of the factors determining the number of members is the objective of the group (Kağnıcı, 2011).

Since this group aims to develop the communication skills and it is performed with students, it consists of 28 individuals.

#### ***1.4. Determining the number and duration of session***

Being performed within the scope of the creative drama course, the communication skill group consists of 12 sessions. Each session lasts for 3 hours as a credit of the course. It is generally considered sufficient and convenient to gather once a week (Ephross and Vassil, 1988).

#### ***1.5. Determining the space where the sessions will be organized***

Considering in terms of creative drama, there is a need for a space where the members will confidently play and act independently from other groups while preparing and displaying the group improvisations (Okvuran, 2001). In this study, one of the classes of the school was used as the group space.

#### ***1.6. Determining the assessment method and instruments***

##### ***1. Assessment method***

This quasi-experimental study with pretest-posttest control group was conducted in an attempt to determine the effect of creative drama course being received by social service students upon the communication skill levels of students (Karasar, 2010).

##### ***2. Assessment instruments***

“Communication Skill Evaluation Scale (CSES)” was used to determine the communication skills of students (Korkut,1996).

#### ***1.7. Data Analysis***

Non-parametric statistics was used in the data analysis as the number of subjects was less than 30 and thus it could not represent the population showing a normal distribution (Akhun, 1986) and the scale being used was based on ranking (Siegel, 1977).

## **2. Preparing the Group Sessions**

Planning includes the projection of the subject, acquisitions, duration, materials, technics and methods of every session and enrolment of activities in the session such as heating, animation and evaluation (DeLuciaWaack, 2006).

### **2.1. Planning each session**

Each session was performed as the stages of creative drama such as heating, animation and evaluation (Adıgüzel, 2006).

## **3. Findings**

Quantitative findings were obtained in this study. The score gap between the pretest-posttest was determined as 3,0 in the experimental group and ,50 in the control group. According to these results, it is observed that the score averages obtained by students in the experimental

group increase on behalf of the posttest. This increase is observed to be less in the control group.

As a result of the study, a statistically significant difference ( $z=-2,732$   $p=,006$ ) was determined between the first and the second measurement scores of students receiving the creative drama course (experimental group), in terms of the score averages of Communication Skill Inventory.

No significant difference ( $z=-,475$   $p=,635$ ) was determined between the first and the second measurement scores of students not receiving the course (control group).

#### **4. Conclusion**

This study questioned the efficiency of creative drama on the communication skills of social service students. For that purpose, two groups were formed; experimental and control group. Creative drama of Communication Skills consisting of 12 sessions was applied to the experimental group. On the other hand, no proceeding was applied to the control group. As a result of the statistical analyses that were applied to the values obtained from the pretest-posttest measurements, creative drama was observed to be effective upon the communication skills of students.

#### **Suggestions**

In order to conduct a creative drama group, it is required to do a planning before starting the group. Unless a good planning is done, there might be some problems regarding the success of the group. The group leader needs time for a good planning.

Keywords: drama, group planning, communication skills

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## Content Analysis of Dissertation of Creative Drama Training

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Creative drama training approved by the Ministry of National Education, has been taught course as 320 hours, 6 steps in Turkey since 2005. This program has the feature of being the first program accepted by the Ministry of National Education in accordance with the decision 18.11.2005 dated and 346 numbered of Board Of Education. In the sixth step of the program, a supervisor is appointed to the educator/ leader candidate. The educator candidate does a project including at least 18 hours application and presents to the jury charged by the association. After the project is accepted, educator/ leader candidate is conferred creative drama educator/ leader title.

This research aims to confirm in which direction of the tendency of the people doing the project from the point of trainees' dissertation types, methods, subject fields, data collection tool used in the searches, data analysis methods and sample properties in the program of Contemporary Drama Association between the dates 1994-2014. Since 2005, 299 projects are accepted from 320 hours program and 299 people are conferred educator/ leader title. These projects change from preschool education to adult education and include different subjects such as teaching a lesson, visual arts, performing arts, concept of communication, empathy.

The researches are made such as "With the Process of Creative Drama, Teaching Biographies of Famous Scientists and Their Contributions To Science", "Creative Drama For Teaching German As a Foreign Language", "The Effects of Theatre Lesson On Teacher Candidates' Communication Skills", "I'm learning numbers: With the method of creative drama, teaching the numbers between 0 and 9 to preschool 6 aged children" In the declaration, it is studied on the dissertations which are prepared on 299 topics including these cited topics.

In the research, content analysis method has been used. In content analysis method which is commonly used in qualitative research, the main aim is to reach concepts and connections which will be able to explain the collected data. In descriptive analysis, outlined and interpreted data are deeply examined and concepts and themes which are not detected with a descriptive approach can be found out. For this purpose, the collected data must be conceptualized, and then be logically organized according to the resulting concepts and accordingly, it must be confirmed the themes explaining the data (Yıldırım & Şimşek, 2013). This study is important with regard to be an example of content analysis for the projects prepared in the field of creative drama, not to be enough content analysis for the quality of prepared creative drama projects in Turkey and to be provided scientific information in the field of creative drama in the field of quality of thesis project by the findings which are attained from the study.

As data collection tool, document review is chosen and content analysis is applied for these documents. In content analysis, certain projects are thematized and tried to be interpreted. These themes include the date that the project is presented, the gender of the person preparing the project, the age range of the participants of the project, the theme of the project, data collection method. The themes in the project are tabulated as number and percentages.

In the study, it is specified that the most of the studies with creative drama are done in the field of preschool, that the number of the projects increased in 2013-2014, that the most of people making projects are women, that a major of projects is studied within the method of creative drama.

### **The result**

In the declaration, dissertations of creative drama have been examined in the determined themes, and the conclusion and reformed suggestions based on obtained datas are mentioned. Although the topics are different in the inspected projects, it is observed to reach the acquisitions for general aims of the creative drama. In education, the pedagogic aim of creative drama is to make a concept or a lesson become more understandable, to turn into an inner experience individually or as a group, to express by reviewing, thinking on it ( Adıgüzel, 2014 from Nickel, 1986). At the result part of the project themed “ Basketball Education With The Method Of Creative Drama” “*the students emphasize that to take a role and responsibility in this process contributed them and state that they understand the importance of giving role and responsibility to their team mates.*”( Kara, 2012). The studied topic with the creative drama method turning into an inner experience individually or as a group is suitable for the leading article of the main aims of creative drama: “self knowledge, self realization, improving communication skills with others”. In another example, it is reached the main aims of creative drama: “problem solving and critical thinking”. At the finding part of the dissertation themed “Creative Drama for Teacher Sufficiency in Creating Awareness” , a teacher candidate states that “*thinking about the problems and finding a solution is the biggest gain of this lesson.*” In the same project, another teacher candidate states that “*there are problems but nobody makes anything for these problems. We are not able to create a solution but we created solutions with these extemporisations and we had little steps.*” (Akkocaoğlu Çayır, 2014).

It is observed that all of 299 projects ended up in accordance with main purposes of creative drama and the studies committed with creative drama has more positive differences than classic education.

### **Suggestions**

It is suggested to make more studies within disicpline part of the creative drama. Because prepared dissertations become more available, it is suggested to publish them in the magazines.

**Keywords:** creative drama, dissertation, educational surveys.

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## Reflection of Audiobooks in Electronic Environment to Child's Paintings

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Changes and developments in the communication and knowledge technologies are being experienced consistently. All these transformation and development, taking place in the transition to globalization and the information society we are in, have also changed and diversified new communication instruments, information sharing ways, information recording media depending on communication ways, information production ways, information sharing ways, information distribution channels and methods for information use. According to this, developments have been experienced especially in publishing, education, communication and informatics sectors. (Önder; 2013, p.10) That these changes and developments have reflected to the most of the books world. Book production has been held not only in printing but also different formats since the past. In librarian literature, visual – auditory or audiobooks which are also called non-book materials; CD, DVD etc. could be listened. Nowadays, becoming widespread of internet accelerated information to reach large masses, thus existing audiobooks have been much more accessible. Developments in communication technologies and especially internet have increased the velocity of information sharing and facilitated access; developments experienced in computer technologies have provided to produce information in electronic environment, transfer to electronic media, store, share and become available. (Önder, 2013, p.10) Now with digitalization, books can be found in different environments by the readers. With the technological devices like; computers, mobile phones and tablets, audiobooks can be listened and watched at any place and time desired.

E-books, at the present time, make progress in publishing, education and information services, day by day with an increasing number they cater wider user groups. (Anameriç and Rukancı, 2003, p.147). Audiobooks which were developed and opened to use of the web page by Sakıp Sabancı University Sakıp Sabancı Museum can be given examples for this saying. These audiobooks peculiarly designed for the children have many benefits and ease of use. These books can be used for the children who don't know how to read and write or just want to listen to the story without reading activity. And also they can be used for the purpose to reinforce reading of the children who knows how to read and write or abecedarian children by following the texts. As books are on art, culture and history, they have educational feature. Books can be accessed from the associated web page and can be listened at any time desired. Furthermore, there is no need to pay any fees, membership on the site and also terms of usage for listening to the audiobooks. On the other hand, books can be easily downloaded to the electronical environments such as computers, tablets and mobile phones. Colourfully illustrated books and the use of picture elements in almost every page allowing the development of a child's visual perception, there is a strong effect to change their imagination and ability to understand the issues better. According to Yavuzer (1992, p.13); child is a dynamic phenomenon and art is reflected as a "thinking language" shape. They see the world in a way they perceive and try to express themselves in various ways.

For the children, art activities are the best tools they can express themselves. For instance; drawing picture is an indispensable game activity. It is possible to see the symbols associated with the child's emotional and imaginative world. Drawing picture is a communication tool for a child. Children's imaginations are very wide. They reveal their feelings and reflect their feelings sincerely. In this context, Sakıp Sabancı University Sakıp Sabancı Museum's special audiobook service book for the children called "Ben Dali" has been examined. Population of the study; Secondary school 7th grade students who live in Bartın, Sample of the study; 28 students, 18 girls and 10 boys who are studying at 7/B class at Hendekyanı Secondary School. This study is limited with a book named "Ben Dali" which is one of the nine audiobooks prepared by Sakıp Sabancı University Sakıp Sabancı Museum. Surrealism art movement which thought to be effects to provide the expression of the inner world through pictures of children hospitalized in the subconscious has tried to present by audiobook to see effects of paintings. This study is a descriptive survey study. It was prepared by using the model; assesment "case study ". The pictures gathered were evaluated by the experts and interpreted descriptively. With this study, it was observed that the students were interested in audiobooks. Surrealism concept which was the topic of the audiobook took attention of the students and students drew pictures reflecting their point of view. With the pictures the students drew we observed that most of the students drew surreal pictures. It is suggested to implement this type of work to different age of groups in order to increase artistic-cultural information of the students, enable them to transfer their inner world, feelings and thoughts to the pictures and increase the interest to the audiobooks.

**Keywords:** Audiobook, Child Picture, Surrealism, Subconscious.

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## Examination of the Effect of Drama Education on Multiple Intelligence Domains of Children Attending to 5<sup>th</sup> Grade

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Drama is a teaching method of enhancing gains in cognitive competences, affective properties, and psychomotor skills. It is also a field of arts education improving the formation of an integral and aesthetical understanding primarily for sensory training. Finally, drama is a discipline, which helps, thanks to its explanatory and controlling opportunities, with describing the processes as they are experienced. As a teaching method, a field of arts education, and a discipline, drama is also effective in assistance of multiple intelligence fields. Upon review of the attainments as a result of drama practices, it is seen that many behaviours, attitudes, or skills overlap with multiple intelligence fields, and that such processes of multiple intelligences as implementation, result obtaining, assessment, and redevelopment are perfect fields of application for drama (Armstrong 2000, Güneysu 2002, Köksal-Akyol 2003, Gardner 2004, McCaslin 2006, Johnson 2007, Bowles 2008, Karabağ 2009, Adıgüzel 2010, Saban 2010, Can-Yaşar 2013).

Based on the idea that drama education would prove to be an effective method in improving the multiple intelligences field of children, this study was launched to support the musical–rhythmic, visual–spatial, verbal–linguistic, logical–mathematical, bodily–kinesthetic, interpersonal, intrapersonal, and naturalistic intelligence fields of children.

“Pretest, posttest experimental design with control group” was applied in the present study to find the effect of drama education on the fields of multiple intelligences in children. The dependent variable in the design was picked as fields of multiple intelligences of children attending to fifth grade, where the independent variable was the drama education, the effect of which on the fields of multiple intelligences in children was being studied (Büyüköztürk 2009, Büyüköztürk *et al.*, 2009).

Two schools among the official secondary schools in Altındağ county of Ankara city center were selected by randomized sampling in the study. Children to be enrolled in experimental and control groups were picked from different schools. The study group was comprised of a total of 65 children with 30 children (19 girls, 11 boys) in the experimental group, and 35 children (19 girls, 16 boys) in the control group.

The “General Information Form” as developed by the researchers to elicit certain information about the children and their families and “Scale for Self-Assessment in Multiple Intelligence Domains” as developed by Seber (2001) to assess the fields of multiple intelligences in children, the validity and reliability of which had been verified, were used in the study. There included eight items for each multiple intelligence domain. Comprised of a total of sixty-four items the scale allowed answers thereto as “yes,” “sometimes,” and “no.”

The drama plans as prepared for the study aimed to support and improve the fields of multiple intelligences in children attending to the fifth grade. The drama plan involved in activities aimed to support the verbal–linguistic, logical–mathematical, visual–spatial, bodily–kinesthetic, musical–rhythmic, interpersonal, intrapersonal, and naturalistic intelligences. Thirty drama plans were prepared and submitted to the opinion of eleven experts.

The “Scale for Self-Assessment in Multiple Intelligence Domains” was applied to the children in the experimental and control groups as pretest. Upon application of the pretests, the experimental group received the Drama Plan. During the study process 30 drama plans were applied to the experimental group for fifteen weeks, twice a week (30 days), in two course hours a day (80 minutes). Children involved in the control group continued with the education program of the Ministry of National Education. Upon completion of the Drama Plan, the “Scale for Self-Assessment in Multiple Intelligence Domains” was applied to the experiment and control groups as the posttest.

Parametric statistics were used in the analysis of data collected by the “Scale for Self-Assessment in Multiple Intelligence Domains” in order to test the aims of the study. The method of data analysis was determined upon descriptive statistics and normality tests (Büyüköztürk 2009). As a result of the Kolmogorov Smirnov Normality test it was concluded that the pretest-posttest scores of children in the Scale for Self-Assessment in Multiple Intelligence Domains had normal distribution. Therefore the scores in the Scale for Self-Assessment in Multiple Intelligence Domains were assessed via parametric statistics.

The significance of the difference between the mean pretest and posttest scores of children enrolled in the experimental and control groups were analysed by *t*-test. The efficiency of the experimental process (drama education) was tested by two-way ANOVA analysis for mixed measurements in the study due to the fact that there were unrelated measurements and time-dependent repeated measurements regarding the experimental and control groups (Büyüköztürk 2012).

It was found that there was no significant difference between the mean pretest and posttest scores of children enrolled in the experimental and control groups ( $p>0,05$ ) in the Verbal–Linguistic, Logical–Mathematical, Visual–Spatial, Bodily–Kinesthetic, Musical–Rhythmic, Interpersonal, Intrapersonal, and Naturalistic intelligence subdomains of the “Scale for Self-Assessment in Multiple Intelligence Domains.” On the other hand it was seen that there was a significant difference between the pretest and posttest scores regardless of the group ( $p<0,05$ ) in the Visual–Spatial, Bodily–Kinesthetic, Musical–Rhythmic, Interpersonal, and Naturalistic intelligence subdomains of the “Scale for Self-Assessment in Multiple Intelligence Domains.”

Following recommendations were presented in line with the findings of the study aimed to find the effect of drama education on the fields of multiple intelligences in children. The study aimed to find the effect of drama education on all the fields of multiple intelligences in children; however, it was found that drama education had no effect on the fields of multiple intelligences. Further experimental studies may focus on the effect of drama education on only one field of multiple intelligences. The present study involved 30 drama plans twice a week. Further studies may employ increased number of drama plans to be applied thrice a week.

**Keywords:** Drama, multiple intelligence, education

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## **Education in Museums and Qualities of a Museum Educator within Contemporary Museology**

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International Council of Museums emphasizes that museums are education, research and culture centers within the code of ethics (ICOM Code of Ethics, 2013). According to the code of ethics, museums are institutions which protect, study and promote cultural and historical heritage by primarily protecting their functions, however, they should dedicate their collections to society and social development. Museum means “knowledge” but at the same time it is also the one to settle, validate, improve and pursue knowledge (Lord, 2007). While fulfilling this function, a museum should cooperate with other establishments and put its collections into use in this direction. New museology understanding of 21<sup>st</sup> century has brought forward the concept of democratic museum with a progressive approach, and it has also added the functions of new museums into literature within the Code of Ethics. Social functions of museums have stepped forward; and they have been renewed with the concepts such as social inclusion, democratization, participation, egalitarian museum, the museum of the new century (Onur, 2014).

Within this regard, it has become important to approach the concepts of modern museology or new museum science and to watch these concepts theoretically and practically. Based on the social functions of museums, in order to form and improve the modern understanding about its most popular function “education”, undergraduate and postgraduate programs have been launched regarding museology or museum science in many countries; international establishments and institutions have made modern definitions of museology, museum education and museum management, and in order for determining the qualities of a museum educator, national and international studies have begun. “Interdisciplinary” which is the outstanding discourse of 21<sup>st</sup> century has been closely related with the discipline of museum education in this period and it has shaped the disciplinary qualities of a museum educator in an interdisciplinary way. To explain the subjects such as who the museum educator is, which educational background he should have, how he should cooperate with other domain experts in a museum and from which areas he would be nourished are all among the motives of

launching these postgraduate programs. In 1958 in Turkey a museum guidebook for teachers was published and in 1962 UNESCO Region Seminar was held about the role of museums on education; and these are perceived as the first concrete steps regarding museum education. In 1982 during the First National Cultural Council, education in museums was emphasized and the idea of starting children departments in big museums was put forward. By this way, education has been accepted as one of the main functions of museums since 1990, educational units have been structured in many museums; museums have motivated their staff for having postgraduate education on museology, museum management and museum education. Postgraduate studies which are launched under the guidance of Yıldız Technical University have continued within Ankara University with the start of postgraduate program of museum education. Postgraduate programs have been launched on initially museology, museum education and museum managements in different universities since 2014; national and international conferences on museology have been held, seminars and trainings have been carried out (İlhan, 2008). In Turkey nowadays, besides postgraduate programs on museology and museum education, there is also museology education at undergraduate level in a university.

### **Objective**

In this study, by examining the postgraduate programs within museum science in Turkey and in the world it is aimed to determine the place of “museum education” among these programs and to discuss the qualities of a museum educator in modern museum approaches within the content of Ankara University Interdisciplinary Museum Education Postgraduate Program.

### **Method**

By studying the postgraduate programs within museum science in the world and in Turkey, this study aims to determine the place of “museum education” among these programs and to determine the “qualities of a museum educator” within the content of Ankara University Interdisciplinary Museum Education Postgraduate Program; and it is designed as a qualitative research. The study is a descriptive one in survey model. Survey models are research approaches aiming to describe a past or present circumstance as the way it is. The circumstance, individual or object that is the subject of the research is described within its own conditions and as the way it is (Karasar, 2004:46). Foreign postgraduate programs on museum science and museum education within the study are going to be analyzed by means of document analyze method which is one of the qualitative research methods. It is called documental analyze to gather data by examining the present records and documents (Bogdan and Biklen, 1982). In this respect, the documents such as student registries in the Department of Interdisciplinary Museum Education, the records of graduate tracking system, interior and exterior correspondences of the department and the activities held by the department will be analyzed.

### **Workgroup**

Workgroup of the study includes nine departments on museum science and museum education at undergraduate and postgraduate levels in the universities of Turkey and the undergraduate and postgraduate departments on museum science and museum education in the USA and England.

## **Findings**

Research data regarding postgraduate programs on museology and museum education in the USA and England and the analyze reports on the department of Interdisciplinary Museum Education are being gathered.

## **Result and Recommendations**

Today museum studies are accepted as a separate branch of science; “education” is considered as a traditional function of museums; and theories and practical works about the planning of modern education in museum are continuing. As a result, it is a must to make a new definition of “museum educator” (Onur, 2014). Thus, the role of museum educator is very important in terms of social development that is the most recent function of museums. For this reason, while training museum educators, determining and seeing practice samples will contribute a lot to the field of museum education in terms of understanding and managing the recent trends on museology in Turkey. The data gathered accordingly in the study will reveal the qualities of a museum educator within modern museology and the recommendations regarding the program which should be used in the period of training a museum educator will be shared with the relevant persons.

**Keywords:** museum, new museology, museum education, museum educator, museum training

## **Oral History in Drama Work: A Witness for the Drama Revolution EYAT (Ankara University, Creative Drama in Education Ensemble)**

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**Purpose of the Research:** The purpose of this research is to investigate the contributions of “EYAT” (Ankara University, Creative Drama in Education Ensemble) as a social student ensemble in Turkey’s Creative Drama development. To achieve this purpose, interviews will be conducted with the students who were a member of EYAT and also with founders and educators of the ensemble since its establishment in 1992. So, this study aimed to investigate the general views of EYAT’s members about using creative drama in their personal and professional lives. The participants will be asked “Why and how they preferred to be a member of the ensemble? What were their expectations? How they decided not to be a part of the ensemble? Based on the participants’ reflections and answers, the researchers will try to find out the effects of the ensemble, which is the first creative drama ensemble in Turkey, in Turkey’s creative drama development.

**So What Is Drama:** Drama is about being a human. It is a kind of doing a role play and improvisation of activities with a group. Within groups and through the experiences of the members about a theme, drama practitioners use some special techniques.

**Drama, Eyat and Its History:** In 1980’s Tamer Levent who is an artist in state theatre and head of TOBAV (State Theatre Opera and Ballet Foundation) interested in the dilemmas of theatre field. Because of these dilemmas he tried to find out new solutions and new approaches with creativity. After his investigations he attended to a workshop in England which was called Drama and he did not know anything about it when he was in Turkey. He saw that this approach was the way that he was looking for the Theatre. On the other hand, he experienced that drama has an educational dimension beside its art form. After he returned to Turkey he looked for the right person who can help him to understand this new approach and spread it. All the signs pointed Ankara University, Faculty of Educational Sciences. Professor Dr. İnci San who was working in Ankara University at the Fine Arts Education Department. Following their first meeting at the Ankara University, both of them decided to combine their resources in different countries. Through his advances he became an important person for Drama.

They decided to set up and lead a workshop, as soon as they can, with theatre players who were living in Ankara and students who are studying at the Fine Arts Education in Ankara University, Faculty of Educational Sciences.

The first participants of these workshops experienced kinds of revolutionary approach to Theatre and Education (Professor Ayşe Çakır İlhan, Associate Prof. Ömer Adıgüzel, Associate Prof. Ayşe Okvuran are some of the names who attended to these workshops and who are still working at Ankara University). Through their contributions Drama becomes more cognoscible in Turkey. The roots of Ankara University, Faculty of Educational Sciences Drama Ensemble has been built up with these steps.

When they feel the need for new activities to use in drama workshops, the founders of the ensemble looked for national and international seminars. Turkish pioneers of the drama used their foreign resources for these seminars. Those drama courses and seminars aimed to give young, talented students the opportunities to develop the practical skills needed for the professional theatrical and educational performance.

Later on, Ankara University became the heart of Drama discipline with İnci San's interactions. In 1985 the first International Seminar was organized with the experts coming from Germany and England. After these seminars drama was quite well known as acceptable as an association.

In 1990 CDA (Contemporary Drama Association) was founded to make the creative drama a discipline and a teaching method widespread in the fields of education, theatre and community. Also, it was founded by Prof. Dr. İnci San and Tamer Levent. So, the Association and Ankara University started to work organically. The members of the Association have come together to share their capacities and experiences and apply them in the further work of international projects:

- in doing qualitative and quantitative pedagogical research;
- in expertise of academic writings in the area of arts pedagogy (scientific articles, monographs, textbooks);
- in organising international and national artistic seminars and conferences for academic staff, teachers and students;

In 1992 EYAT was founded with the contributions of Ayşe Okvuran and Ömer Adıgüzel for reaching the aims mentioned above.

Since its establishment, EYAT (Ankara University, Creative Drama in Education Ensemble) became a laboratory of the Drama field. It was also kind of a bridge between Ankara University and CDA. Because of these reasons it became more than an ensemble. As a laboratory, EYAT hosted most of the new activities with its members. Thus, as an ensemble, it was a witness of this revolutionary approach in its first years and still it is for 23 years.

**Methods:** In this research, the qualitative research method is used as the investigation method. The data of the study were collected by the design called as oral history.

**Data Collection Tools:** The data of the research will be collected through semi-structured interviews with the participants.

## **THEME 13: School Readiness**

# Development of Early Literacy Skills Assessment Tool, Validity and Reliability Study

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Learning to read and write is a key developmental milestone in a literate society. Early literacy knowledge serves as the foundation for children's subsequent attainment of conventional literacy abilities, including reading and writing (Justice, Invernizzi and Meier, 2002; Lonigan, 2006). Early literacy skills are; phonological awareness, print awareness, comprehension, letter and alphabet knowledge and early writing abilities. Assessment of early literacy skills is very important subject to prepare developmental activities for preschool children. There are some studies about development of tools on early literacy skills (Invernizzi, Sullivan, Meier and Swank, 2004; Torgesen and Bryant, 2004; Whitehurst and Lonigan, 2001; Yopp, 1995). This study aimed to develop an "Early Literacy Skills Assessment Tool" validity and reliability study to assess the early literacy skills of preschool children in Turkey.

## Method

The research is designed in accordance with the survey model. Having reviewed the literature on the early literacy skills assessment, the sub-dimensions of planned assessment tool as well as an item pool were formed and content validity was conducted by consulting the expert opinions. The study was piloted first with 47, and then 150 children. As the purpose of the first piloting was to see whether the children could understand the instructions of the assessment tool or not, hence, no statistical analysis were performed at this stage. The second piloting aimed at analysing item discrimination and difficulty values of data collected excluding the sub-test of "Story Comprehension". For the Story Comprehension sub-test, the items to be included in the research were determined based on the responses from children and the expert opinions. After the item analysis, 116 of them remained in the five distinct sub-tests. The research sample is composed of 473 children of 48-77 months, 244 of whom are female and 229 male, studying at 23 schools in six districts of Ankara during the school year of 2011-2012. The assessment tool items were evaluated by giving points of "1" for the correct responses and "0" for the incorrect ones. The applications were practiced with the preschool children on one-to-one basis.

## Findings

Exploratory, confirmatory factor analyses were performed and item discrimination values were examined within the scope of validity analyses of Early Literacy Skills Assessment Tool sub-tests. For the reliability, the sub-tests were investigated according to KR-20, test re-test and split-half reliability.

The findings of the research revealed that according to total variance for the exploratory factor analysis of Phonological Awareness Skills Assessment sub-test was 59.73%. This sub-test is composed of five factors and 53 items. Print Awareness sub-test has three factors and 16 items with a total variance of 40.01%. The contribution of single factor structure in the

Story Comprehension sub-test to the variance is 40.22%, in the Matching Images sub-test is 44.38% and Pre-Writing Skills sub-test is 56.70%. These three sub-tests (Story Comprehension, Matching Images and Pre-Writing Skills) are composed of 9 items each. In line with confirmatory factor analysis,  $\chi^2$ , Sd, RMSEA, GFI, CFI, AGFI and NNFI fit of the sub-sets were examined. The results of the confirmatory factor analysis displayed that Print Awareness and Pre-writing Skills Assessment sub-tests have a weak fit; while, other sub-tests have a fit value at the acceptable level. Item discrimination for the groups at the top and bottom 27% showed that all items are distinctive. Based on these results, Early Literacy Skills Assessment Tool has five sub-tests with a total of 96 items.

The KR-20 reliability value for the sub-tests of Early Literacy Skills Assessment Tool ranges between 0.61 and 0.91. The KR-20 reliability value for the Phonological Awareness Skills sub-test is 0.91, its test re-test reliability is 0.92 and split-half reliability is 0.76. The KR-20 reliability value for the Print Awareness sub-test is 0.75; test re-test reliability is 0.72, while split-half reliability is 0.60. The KR-20 reliability value for the Story Comprehension sub-test is found as 0.61, test re-test reliability as 0.75 and split-half reliability as 0.64. The KR-20 reliability value for the Matching Images sub-test is 0.71, test re-test reliability is 0.64 and split-half reliability is 0.70. Finally, KR-20 reliability value for the Pre-writing Skills sub-test is 0.77, test re-test reliability of 0.86 and split-half reliability of 0.72.

### **Conclusions and Suggestions**

This study concludes that sub-tests of Early Literacy Skills Assessment Tool developed for preschool children (48-77 months) are valid and reliable. Researchers and teachers can use subtests both all of them and also separately. The assessment tool is recommended to be worked on further for the norm studies.

**Keywords:**Preschool Education, Early Literacy Skills, Assessment

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# Primary Education Problems of Seasonal Agricultural Workers' Children

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Short term migration of agricultural workers from where they live to labor-intensive agriculture production areas is called “seasonal agricultural labour” or “agricultural labour” (Çetinkaya, 2008). The education problems of seasonal agricultural workers' children are different from other disadvantaged social groups. Special policy requirements are needed for the access and attendance of seasonal agricultural workers's children to school. To shed light on these policy measures, this study will explore answers for the following questions:

1. What are the public policies and implementations regarding the primary education problems of seasonal agricultural workers' school-age children?
2. What are the opinions of parents, teachers and school directors regarding the primary education problems (access, attendance, success, adaptation, completion) of seasonal agricultural workers's school-age children?

## Methodology

**Research Model:** The study was designed as a descriptive research and structured as a field study.

**Population and Sample Selection:** Population of the study are seasonal agricultural worker parents who have school-age children, teachers and school managers of the seasonal agricultural worker students and Provincial Ministry of National Education Directors of the selected provinces. Sample of the study was selected purposefully according to the migration

patterns. Two groups of provinces were selected as a sample of study: emigrant provinces and immigrant-receiving provinces. While Diyarbakır and Şanlıurfa were selected as emigrant cities, Adana, Ordu, Ankara and Manisa were selected as immigrant-receiving cities. Final study sample included four groups:

1. Seasonal farm worker parents who have primary school-age children,
2. Primary school teachers and secondary school counsellors in selected provinces,
3. Primary school counselors in selected provinces,
4. School directors (head teachers and deputy principals) and Provincial or District Ministry of National Education Directors in the selected provinces.

### **Data Collection Tools and Techniques**

Research data was gathered through four different techniques: Analysis of related documents, questionnaires, semi-structured interviews and field observations. Within this framework:

1. All official documents (circulars, regulations and reports) related to child labour, seasonal agricultural work and education were collected and analysed to identify the problem and update the legal framework.
2. Questionnaires were developed for the seasonal farm worker parents of school-age children and applied to 500 parents.
3. Semi-structured interviews were made with 50 seasonal agricultural worker parents of school-age children.
4. Semi-structured interviews were made with 26 teachers and 17 counsellors.
5. Semi-structured interviews were made with 14 Provincial and District National Ministry of Education Directors in selected cities.

### **Analysis of Data**

1. Data collected through questionnaires analysed by descriptive statistical techniques percentage and frequency.
2. Tape-recorded semi-structured interviews were transcribed. After transcription of interviews, answers of each participant listed under the related questions and through content analysis method major and salient common themes determined for each question. After this process, responses of samples were grouped under the related themes.
3. Data collected through observation form were analysed by descriptive techniques.

### **Findings**

1. Since 2010 there is an obvious improvement in public policies and preventive measures for the problems of seasonal agricultural workers' children. Having said that they still experience difficulties in accessing and attending to school and the major obstacle for accessing and attending school for these children is child labor.
2. As school managers also indicated there are not effective mechanisms for detection and tracking of migrating school-age children. Although it is obvious that these children need special support to catch up with the other students, they are left to the voluntary efforts of their teachers.
3. Although public policies regulating the access and attendance of the seasonal agricultural workers' children to school are comprehensive and reflected the multidimensional nature of the problem, there are major problems in the implementation stage. For this reason, to solve the root causes of this problem, there is a need for lasting, long-term preventive measures which takes into account the necessary financial and human resources.

4. It was seen that local teachers and head teachers are not generally informed about public policies regulating the formal education of seasonal agricultural workers' children and the ones who are more interested are experiencing major financial difficulties to solve these problems.

### **Conclusion and Recommendations**

Every year thousands of children leave their school before school year ends and migrate with their families to work in labor-intensive agriculture sites. This migration and life style that does not in line with the school's academic calendar cause many children, especially girls, to drop out of the school. Although students are actually enrolled in where they live, they sometimes try to go to school where they migrated but many of them do not attend to school at all. This discontinuous relationship with school causes high drop out rates and adaptation problems among these students. Recommendations are as follows:

1. Regional Primary Boarding Schools can be an alternative education sites for seasonal agricultural workers' children in provinces having high numbers of immigrant farm workers.
2. Opening full-fledged schools only for these children both in emigrant and in immigrant-receiving provinces can be an effective solution to this problem.
3. To collaborate and cooperate with different institutions for actualizing comprehensive implementations leaving no child behind, a new administrative unit can be established within the body of Ministry of National Education.
4. Educational programmes for local authorities who are responsible for the formal education of seasonal agricultural workers' children should be organized to raise awareness and consciousness about right to education of these children.
5. Demographic findings show the need for a specific adult education programs to improve the life skills of seasonal agricultural worker parents. Educational programmes responding the specific social, physical and cultural needs of adult agricultural workers may help these people to understand the importance of formal education of their children and motivate them to support their children's education.

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## Some Variables Predicting the School Readiness of Preschool Children

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The main purpose of this study is determining the predictive power of the levels of the school readiness in the preschool children by some variables such as social skills, social interaction practices and economic status.

The population of the study in the general screening model is composed of 60 to 66-month old children attending to independent preschools registered by the Ministry of National Education in Konya, Turkey. The sample of this study is selected through stratified sampling method among schools, which represent families and their children of three different socio-economic and socio-cultural levels (low, mid and high), in three central districts of Konya. These levels are determined by the Directorate of National Education. Sample group is composed of 42 preschool teachers and 210 children in total, which is sufficient in terms of the number of the participants.

Social Skills Test for Preschool-aged Children, Social Interaction Practices for the Preschool Years (SIPPY) Nuestionnaire and Metropolitan School Readiness Test were employed in the study. Multiple regression analysis and stepwise regression analysis were used for the analyses of the study. By employing linear multiple regression analysis, it was determined that to what extent the variables social skills, social interaction practices, sex, and economic status predict the school readiness level.

Stepwise regression method was employed in order to determine which of these independent variables, used in the study, make a significant contribution to predict the school readiness level. In multiple regression analysis, an independent variable having the highest correlation with a dependent variable was first incorporated into the model. There is a relationship between the school readiness and the variables, social skill and social interaction practices. Although there is not an apparent direct relationship between the economic status and school readiness, there is a relationship between social skill and social interaction practices that affect school readiness directly. The highest correlation ( $r=0.26$ ;  $p<.001$ ) exists between the school readiness and social skill. By applying stepwise regression analysis method, it was defined that the variables making a significant contribution to the prediction of the school readiness level and the contribution of each of these variables to total variances explained in the prediction of school readiness. In employment of this method, total variances are explained in school readiness at the end of three stages that were obtained In the second regression model, the social interaction practices variable has been added to the model, as well as the social skill variable; the variance shows that the school readiness score increased from 6.8% to 7.1% ( $R=0.26$ ;  $R^2=0.071$ ). In other words, in addition to contributing significantly to the social interaction practices a contribution of 0.03% can be considered as quite low. In the third regression model, the economic status practices has been added to the model, as well as the social skill and social interaction practices, and following the addition of this variable to the model, the variance shows that the school readiness score increased from 7.1% to 9%. In other words, about 2% contribution of the economic level to the explained variance is observed.

According to this result, socio-economic status among the factor employing in the research is a factor that is of second degree in the predictive power of the school readiness. In conclusion, social skill is the most powerful predictor of the school readiness. Bulotsky-Shearer, et al. (2012) suggested that classroom relationships, especially those experienced between peers, can help children develop the social skills necessary for school adjustment and long-term academic success. According to Skibbe et al. (2011), school readiness refers to characteristics of children's development, including social skill, as well as general knowledge, cognitive ability, and language, that are associated with children's preparedness for school. Bulotsky-Shearer, et al. (2011)' göre, classroom relationships, especially those experienced between peers, can help children develop the social skills necessary for school adjustment and long-term academic success. In the literature, there are some researches showing that children exhibiting more socially competent behaviors generally being in a better position academically in school than children exhibiting less competent social behaviors (Bulotsky-Shearer et al., 2011; Escalon & Greenfield, 2009; Dobbs et al. 2006; McClelland et al., 2007). The results of the above-mentioned study shows that the relationship between the children's social skills and their academic successes emphasizes the interconnection between the social skills attained in childhood and academic success. This studies concentrated on the relationship between the children's social skill developments and their academic successes support the results of this study. Thus, the awareness of the families and educators should be raised, since they are the most important role models that may affect the social skills of an individual.

**Keywords:** School readiness, Social interaction practices, Social skill

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# Preschool Teachers' Views About Disciplinary Models

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## Introduction

Classroom management refers to the process of creating a positive social and emotional climate in the classroom (Morris, 1996) that is conducive to successful instruction (Brophy, 2006). Burden (2004; 2006) has further suggested that classroom management covers teachers' actions aimed at organizing a learning environment, promoting social interaction, active participation in learning processes, and self-motivation. In short, it is clear that recent definitions of classroom management emphasize a much wider array of practices than the creation of rules and the enforcement of discipline. As Lemlech (1999) put it, classroom management is similar to leading an orchestra. Various scholars have seen it as requiring up to five distinct dimensions: (1) organizing the physical environment of the classroom, (2) managing and facilitating instruction, (3) time management, (4) management of relations and communication, and (5) child behaviour management (Burden, 2006; Lemlech, 1999; Montero-Sieburth, 1989; Şahin, 2013; Wragg, 2001).

The focus of this study is on behavior management, and in particular, practices aimed at predicting and preventing disruptive behaviors before they occur (Başar, 2006). Several scholars have argued that clear rules, disciplinary strategies and disciplinary procedures should be set up to support teaching and learning in an atmosphere of clear expectations and well-defined norms (Ayers & Gray, 1998; Burden, 2006).

The Turkish preschool curriculum is, in broad outline, child-centered, constructivist and developmentally appropriate. However, inappropriate implementation of these characteristics in teachers' classrooms has been widespread (Sak, 2013; Şahin, 2013). With the wider aim of improving teachers' behavior-management and disciplinary strategies, this study seeks to determine their views related to the models and strategies of discipline that can be used in preschool classrooms.

## Method

The sample for this study consisted of 310 teachers working in preschool institutions in Turkey. Data was collected through a questionnaire developed by Koç (2011) and aimed at revealing the views of teachers about the Behavioral Change Model, Rudolf Dreikurs' Social Discipline Model, the Kounin Model, the Glasser Model, the Canter Model and Teacher Effectiveness Training. All coding of questionnaires and data analysis will be conducted using SPSS 18 (Statistical Package for the Social Sciences) software.

## Results

As has been emphasized in the literature (Aksoy, 2001; Koç, 2011; Tertemiz, 2007), it is possible that preschool teachers' disciplinary approaches and strategies will be shaped based on various disciplinary models and philosophies. As such, it is expected that the sampled preschool teachers' disciplinary strategies will reflect the influence of more than one such model or philosophy. Given the strong emphasis placed on child-centered, constructivist and developmentally appropriate educational techniques in Turkey's undergraduate education for future schoolteachers, it is expected that novice teachers – defined as having been in the field

three years or fewer (Mcmullen et al., 2006) – will hold child-centered, constructivist and developmentally appropriate views related to disciplinary strategies in preschool classrooms.

### **Expected conclusions and implications**

It is assumed that this study will reveal significant new information about the views of preschool teachers related to models and philosophies of discipline. Such information will be useful for early childhood professionals seeking to better understand the importance of teachers' development of effective disciplinary and classroom-management strategies. The findings may also help preschool teachers to recognize that there may be more than one correct way to manage children's behavior, and to prevent and find effective solutions for misbehavior.

**Keywords:** disciplinary models, preschool education, preschool teachers, teachers' views

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**THEME 14:**  
**Technology and Education**

## **Determination of Human Centered Ecological Design (HCED) Criteria in Open and Distance Learning**

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Open and Distance Learning (ODL) is presented as a solution option that face to face communication cannot take place for various reasons between learners and teachers in the classroom. On the other hand, ODL has become an original version of a system contributed with advanced communications technologies. At the core of the system concept, which brought together in order to achieve a common goal, the important point is the common properties and the integrity of the interactive parts to each other as well as the continuity and viability of this integrity. Before trying to solve, Human Centered Ecological Design (HCED) requires a design approach that incorporates trying to understand the system with particular challenges. It particularly focused on the causes of the design requirements, the conditions which reveal those causes, the product designed for user satisfactions and expectations to understand the user changes. HCED is important to define the components of a system taken as a reference model, describe the relationship with each of these components with the duties and functions, understand the expectations and satisfactions of learners, design the program according to these expectations and implement the satisfaction oriented applications in an Open and Distance Learning (ODL) system.

The main purpose of this research is to determine the HCED based design recommendations for a living, efficient and sustainable ODL system. For this purpose, the following questions will be answered:

To define the principles of Human Centered Ecological Design (HCED) which can guide the Open and Distance Learning (ODL) experts

- a. What are the balance elements, inputs and outputs of HCED?
- b. What are the balance elements and the interrelation of these elements?
- c. How to ensure the balance relations between these elements?
- d. How can HCED be sustainable?
- e. What are the sustainability process of HCED?
- f. How can reduce the waste elements of HCED and design HCED without creating waste elements?

This research aims to design/build an approach for interactive, efficient, rich and innovative ODL experiences with HCED is to prepare a roadmap for integrating an exist structure, and the main guidelines for establishing the necessary infrastructure for the future use of HCED in the framework Universal Design principles. The data were collected and analyzed through a Delphi study to defined HCED based principles. The proposed sustainable HCED principles based on defining, decreasing and avoiding waste in ODL is formed within the framework of Universal Design principles. It is believed that the model would be supportive for sustainable ODL system design and implementation.

## **METHOD**

### **Research Model**

This is qualitative case study. Because of the nature of the research question, this is a type I-case study.

### **Research Site and Participants**

The process for conducting the study reported here involved an initial gathering of topics of interest to ODL followed by a broad emailed solicitation of nominations of people who would be appropriate participant experts for the study based on the following general criteria: at least five year work experience in the ODL, Universal Design, Human Centered Ecological Design and/or a wide variety of experiences and activities of working in settings where educational service providers are transforming to ODL, and/or knowledge of design and delivery of ODL based courses.

After the steering committee identified potential members for the Delphi panel from the initial pool of nominations, eleven participants (11) agreed to complete the required three rounds of the survey.

### **Data Collection Tools and Data Analysis**

This Delphi study began with a questionnaire developed and revised by the researcher. To accomplish the research purpose, both quantitative and qualitative research techniques were utilized. Moreover, the combination of these methods helps to generate new perspectives and stimulate new directions in the data analysis. The methodology combinations provide data triangulation from a variety of data sources, experts and also methodological triangulation from multiple methods.

## **FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

The research data from all three rounds in the study were collected. At the end of the third round, the participants had consensus on the principles of Open and Distance Learning (ODL) Human-Centered Ecological Design (HCED), and the work was terminated. On the other hand, data analysis of the research is still ongoing and will be completed by the end of April.

**Keywords:** Human Centered Ecological Design, HCED, Human Centered Design, Ecological Design, Open and Distance Learning

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# **A Critical Look to Using New Information and Communication Technologies in Education**

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The aim of this study is to probe the negative effects of using information and communication technologies (ICT) in education from the point of sociology of education. Because of a very intense use of ICT and the gradually increasing number of the people using them, the attempts to integrate ICT with education have increased (Aktaş, Gökoğlu, Turgut & Karal, 2014, p. 260). But besides their benefits, ICT have still some important negative effects. Because “technology is not neutral and its meaning changes according to its intended use” (Aksoy, 2003, p. 4).

## **Method**

This study is designed as a qualitative content analysis. In more specific terms, “critical conceptual analysis” of the related literature is deductively employed as a method of constructing this study. 3 specific titles were composed for data collection: the problems about ICT users, functional problems of using ICT in education and economic and sociopolitical problems of using ICT in education. Books and articles dealing with using ICT in education issue were determined critically. Later, it was conducted that how they clarify the problems of the study. After comparing and contrasting the data gathered, patterns were established and they were analyzed critically.

## **Findings**

### **The Problems about ICT Users**

The effectiveness of using ICT in education is directly correlated with users’ competencies. But in FATİH Project, for example, there seems a lack of information. Many teachers do not prefer to use them because of the lack of information and inadequate in-service training activities on using ICT in education (Usluel, Mumcu & Demiraslan, 2007, p. 174). Students find using ICT in education as they are composed of entertainment. But “using ICT as a learning tool means that learners are actively participating in and contributing to their own learning, as they find, interpret and evaluate information, drawing on problem solving and critical-thinking skills” (Stoll, Fink & Earl, 2005, p. 67). Parents, another important partner of using ICT in education, have similar problems.

### **Functional Problems of Using ICT in Education**

“There has never been a technology that exemplifies McLuhan’s aphorism, *the medium is the message*, better than computers” (Postman, 1993, p. 118). *The medium is the message* means that the technology used to convey the content moves ahead of the content itself and becomes

more important than it. In such a case, a qualified education cannot be mentioned. Educational processes are the processes of interaction at the same time. And as Davis (2000) stated, “knowledge is usually situational, and is often shared and collectively produced” (as cited in Woodill, 2004, p. 12). But, using ICT in education puts a question mark in the minds within the context of togetherness and interaction. It is clearly seen in the other computer based distance learning processes, like E-learning.

### **Economic and Sociopolitical Problems of Using ICT in Education**

“Schools cannot be analyzed as institutions removed from the socio-economic context in which they’re situated” (Giroux, 1983, p. 46). For instance, the inequalities based on the distribution of income, as a socio-economic problem, come up in educational environments in many ways and using technology in education is one of these ways. “Digital divide, which indicates a differentiation between ones having information technologies and the others without them, becomes an important problem in providing equality” (Uysal & Yıldız, 2007, p. 172). And besides, “there has been a big faith in technology to transform schools and leapfrog over current difficulties” (Hurn, 1993, p. XI). But it is impossible because “the Social Contract was not drafted on a word processor. It cannot be repaired with one” (Sanders, 1995, p. 128).

### **Conclusion**

There haven’t been desired results from technological investments on education, because there is an obvious lack of information among users of ICT in education. Technology is just an important tool helping people with their works, but it hasn’t got the ability to transform social institutions on its own. So, it is not realistic to expect a revolution from technology in education. Because “school reform is a social challenge, not a technological problem” (Cordes & Miller, 2000, p. 97). Using ICT in education has reinforced the current inequalities rather than removing them. Consequently, using ICT in education is an inevitable result. But it should be kept in minds that technology is a tool, not a goal.

**Keywords:** Technology, Education, ICT.

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# Project SELCA: Building a Distance Learning Milieu via the Software Engineering Life Cycle Approach

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## Purpose

The main goal of this research is to develop and establish the management, communication, learning and assessment dimensions of Distance Education (DE) milieus within the framework of the Software Engineering Life Cycle Approach (SELCA). In this context, the study has two main steps:

- (1) Process: To establish a DE milieu based on the *Planning, Analysis, Design, Implementation* and *Maintenance* steps of SELCA.
- (2) Product: In this context, an international open database and reference area as a resource in DE on the Internet will be planned, analyzed, designed, implemented and maintained. The annotated bibliography related to DE-based resources (thesis, dissertations, articles, conference proceedings, etc.) will be archived and stored on this Web site.

To develop a DE milieu with SELCA, the subquestions given below will be focused on finding answers to the main research goal: When the *Planning, Analysis, Design, Implementation* and *Maintenance* steps of SELCA are integrated to design a DE environment:

- (1) What are the characteristics and qualifications of the *Management* dimension of DE?
- (2) What are the characteristics and qualifications of the *Communication* dimension of DE?
- (3) What are the characteristics and qualifications of the *Learning* dimension of DE?
- (4) What are the characteristics and qualifications of the *Technology* dimension of DE?
- (5) What are the characteristics and qualifications of the *Evaluation* dimension of DE?

## Method

### Research Design

This is a qualitative case study, and a human-labor intensive research. In this process, when the people work together coordinately, efficiently and effectively, this affects the quality of the final product. Because of highlighting the human power in the Distance Education (DE) setting, this study is an innovative study. In addition, it will be the first research in this area in Turkey, or internationally, that deals with DE & SELCA combined to design, produce and maintain each DE dimension.

### Research Site and Participants

The research area and participants of this project are the research team and the partners as well as the users of the Web site.

### Data Collection Tools and Data Analysis

This research is a dynamic process starting with the beginning of the data collection process of the study until the end of both qualitative and quantitative data collected from different sources:

1. Quantitative Data (*Individual Interviews, Focus Group, Semi-Participatory Observations, Document Analysis*)
2. Qualitative Data (*Semi-Structured Questionnaire, Structured Questionnaire, Delphi*)

## **Findings**

The Project SELCA provides 21<sup>st</sup> century learners with insights into other disciplines, and with skills and knowledge that can be applied to the solution of problems in those disciplines. The Project SELCA offers a foundation that permits graduates to adapt to new technologies and new ideas. Therefore, these students' potential to make a positive difference in the world. Designing learning milieus and materials via The Project SELCA enables today's learners to make a significant difference in the world, ranging from the sciences (human computer interaction projects, robotics, artificial intelligence, etc.), to financial services, to education, to engineering, to law, to business, to medical studies, to communication and to entertainment. In this context, there are three main areas which The Project SELCA focuses on developing the professional lives of today's learners:

- **Research Fields and Specializations:** Numerous research and specialization paths are available in DE. There are the four basic areas, which divide the discipline of DE: 1) DE and Education; 2) DE and Communication; 3) DE and Technology; and 4) de Learning and Business. Specialization in DE includes fields such as artificial intelligence, natural learning process, formal learning process, informal learning process, adult learning process, etc. focused on the theoretical aspects of the discipline. Also, DE concentrates on engineering and technology subjects such as new information and communication technologies, programming languages, social networks, information sharing and digital societies.
- **Careers in Industry:** A degree in DE lends itself well to various occupations in industry. DE experts often find work as instructional designers, in-service trainers, learning environment developers, social network designers, or learning experts. They may work for learning and technology companies or in other associations, such as investment banking, military and police, publishing houses or medical services; because every major industry has a need for the development and support of a constantly evolving DE.
- **Careers in Research and Academia:** An undergraduate in DE lends itself well to careers in academia and research. Most graduates will likely end up pursuing faculty positions at major research universities, although some may opt for a professorship focused on teaching rather than research, and apply to jobs at liberal arts schools. There are also opportunities for research outside of the university. Many learning and education think-tanks will hire Instructional Designer graduates who focused on DE for conducting research in cutting-edge technologies. Numerous government and Department of Education jobs for these people have academic expertise in DE.

## **Conclusions**

The demand for people skilled in Distance Learning (DE) continues to grow; because critical and creative thinking skills are essential in all areas of society. DE is a multidisciplinary area that seeks to understand and explore the world around us, both natural and artificial, in terms of learning. DE will be particularly, but by no means exclusively, concerned with the study, design, and implementation of education systems, and understanding the principles underlying egalitarian ideas. DE will be the study of principles and practices that underpin an understanding and modeling of education, and of their application in the development of learning systems.

**Suggestions**

The Project SELCA can be a quintessential design, sharing attributes with Education, Learning, Science, and Technology as well as Business:

- It has its own theoretical foundations and educational underpinnings, and involves the application of logic and reasoning.
- It embraces a scientific approach to measurement and research.
- It involves the design, construction, and testing of purposeful artifacts.
- It requires understanding, appreciation, and application of a wide range of learning models.

**Keywords:** Distance Learning, Distance Learning Milieu, Dimensions of Distance Learning, Distance Learning Design, Life Cycle, Software Engineering Life Cycle, SELCA

## **A Proposal for Turkish Language Association's Online Dictionaries in Terms of Multimedia Design Principles**

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Since the early times of the written history, dictionaries have been used to store the lexicon of a given language and to transmit it beyond generations. Dictionaries, in this sense, are learning tools that establish the building blocks of vocabulary acquisitions and promote proper use of a language (Karadüz, 2009). Turkish Language Association (TDK), established in 1932, is a non-profit governmental organization that aims to collect, compile, present, and protect the wealth of Turkish (Turkish Language Association, n.d.). Over the years, the association has conducted numerous studies on Turkish language and created many distinct dictionaries such as Great Dictionary of Turkish, Contemporary Dictionary of Turkish, and Folkloric Dictionary of Turkish. Originally those dictionaries were published in print only; nonetheless, TDK have also published most of the dictionaries in unabridged format at its web site ([www.tdk.gov.tr](http://www.tdk.gov.tr)) for free of charge in the last decade. Moreover, TDK enriched its dictionary portfolio with an online pronunciation dictionary. While this transfer from print to digital format increased the accessibility of dictionaries, TDK has not employed the full potential of new medium to overcome the limitations inherent in print format, such as remarkable increase in volume and decrease in portability as the content broadens. The differences between mediums should be considered in dictionary design.

Another aspect that affects dictionary design is learner characteristics. The field of cognitive psychology have provided us with clues about the nature of human cognitive system. Research to date showed that human working memory (a) has limited processing capacity, (b) and consists of separate processing channels for verbal and visual stimuli (Baddeley, 2012), and that poorly-designed materials detriment learning outcomes by hindering working memory processes (Sweller, Ayres, & Kalyuga, 2011; Sweller, 2007). These contributions to the literature have led to a new branch of research that focuses on effective information representation ways to support meaningful learning (Lohr & Gall, 2007), and evidence-based multimedia design principles have emerged (e.g., Park & Hannafin (1993), Mayer (2009), and CAST (2011)). Although these principles were designed considering a relatively traditional form of instructional materials that are quite different than dictionaries, design principles also have implications for lexical context. Considering improved access to multimedia content, any dictionary designed in the digital age should comply with multimedia design principles to improve learning outcomes by making a good use of learners' cognitive resources.

Given the importance of design in learning outcomes, the purpose of this study was to evaluate presentation style of the online dictionaries of TDK in light of multimedia design principles and provide suggestions for improvement. To this end, the authors examined the current state of TDK dictionaries and analyzed design principles from a lexical perspective to determine implications. Moreover, studies on Turkish Language Teaching were examined to

offer better suggestions in line with the needs of learners of Turkish. During the study, the content of the definitions included in the dictionaries were not evaluated since it was beyond the scope of the study. Therefore, it was assumed that TDK has generated all definitions in a clarity-focused manner by using the most common words and avoiding profession-specific language. In order to provide the cohesion, 13 web-based dictionaries and 3 web applications generated by TDK were double-reviewed by two researchers.

The findings indicated that the current presentation format of TDK dictionaries does not constitute an example of an interactive multimedia dictionary mostly because of the paper-based origin of the dictionaries. While print format limits the content that can be included in a given dictionary due to scarce cost and size, those limitations are not present in today's computer-based environments. To achieve better results in terms of promoting proper language use and providing a wealth of information for individuals in a user-friendly fashion, we suggest that all TDK dictionaries available online should be merged into a coherent body of knowledge. The development of a unified multimedia dictionary that includes word definitions, connotations, pronunciations, visuals for select entries, and meaningfully organized additional information boxes regarding proper use of Turkish would benefit native speakers and foreign speakers of Turkish alike (Laufer & Hill, 2000), and consequently would put TDK one step forwards in presenting the Turkish language. The detailed analysis of current status and suggestions for future development will be elaborated in the full paper.

**Keywords:** multimedia dictionary design, Turkish Language Association, vocabulary acquisition, proper language use

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# Flipped Classroom and Cognitive Load

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Studies run for enhancing the education show that students at passive roles at class are facing learning problems (Clark, Nguyen & Sweller, 2005). Researches have pointed out the importance of participation of students in-class activities and being responsible for their own learnings for the solution of these problems (Lord, Prince, Stefanou, Stolk, & Chen, 2012). According to Berret (2012); usage of computer technology and internet in education, enabled students to reach information at interactive conditions by excluding data transfer from classrooms. It has been emphasized that innovator models were developed which rotates the student choices from traditional to online education by means of usage of information technologies for education purposes (Tamim, Bernard, Borokhovski, Abrami, and Schmid, 2011). Flipped Classroom model which provides students to realize lower cognitive works such as gathering information and understanding before the lesson and to focus upper cognitive works such as application, analyze, syntheses and evaluation with work groups during courses also accords with Bloom Taxonomy perfectly. If considered with the view of cognitive load, there are studies supporting that personal education guides the working memory in a better way (Clark, Nguyen & Sweller, 2005). Controlling the cognitive load level in education gains importance. Despite the fact that “flip class “is a popular term nowadays, if we check the literature, we do not run across excessive academic studies related to the subject (Pierce & Fox, 2012; Abeysekara & Dawson, 2014). It is observed that especially studies analyzing the effects of flip class model on cognitive load are needed. Aforementioned study is realized to contribute this deficiency.

## Method

### Research design

In the research, a scale consisting of a unique question related to applications given at each weekend applied to students to determine the effect of flip class and face-to-face education environments over cognitive loading variable. Repeated Measures ANOVA has been used for repeated measures to find out cognitive loading conditions of students basing on environment.

### Participants

The research has been run on 1st grade students studying at departments of Atilim University faculty of Arts and Science during 2013-2014 education season. Half of 50 students attending the research have been replaced to face-to-face learning environment and the other half have been replaced to flip learning environment.

### Data collection tools

Cognitive load scale developed by Paas (1992) has been used for measuring the cognitive load. In this research 9-ary evaluation scale has been used. Scores below 5 which is the median show us that cognitive loading level is low. Within the scope of this research, according to the analysis results related to the solidity of the scale, Cronbach Alpha coefficient of the internal consistence of the scale is calculated as 0.90.

### **Data analysis techniques**

Repeated Measures ANOVA test used for testing students' cognitive load conditions differ or not. When tested with Shapiro-Wilk test, the dispersion has been observed as normal to check the dependent variable shows normal dispersion or not when the sampling number is equal to or lower than 50. The research has been tested with Levene Statistics to see false variants of dependent variable between groups are equal or not. Sphericity Test has been tested with Mauchly's Test of Sphericity, homogeneity of variants were analyzed and sphericity hypothesis has been covered according to the test result.

### **Findings**

Week and Group interactions also didn't mean something ( $p > 0.05$ ). But cognitive load levels between groups differ significantly ( $p < 0.01$ ). Average table shows, students educating at flip learning group were loaded less as cognitively. Independent samples have been tested with t test to find if average cognitive load level for seven weeks differs according to groups or not, basing the results it has been concluded that there was a significant difference between the average cognitive load levels of seven weeks of students educating at flip learning environment and the average cognitive load levels of seven weeks of students having face-to-face education ( $p < 0.05$ ). According to this found divergence, it has been observed that students educating at flip learning environment were cognitively less loaded.

### **Conclusions and Suggestions**

Cognitive loading comes at the top of the reasons blocking learning and affecting success (Conklin, 1987). If we check the literature, we run across restricted academic studies related to flip model. In this study which was realized as a support to these researches, the innovating and ensuring active role to the student in education approach of Flip class model has positive effects on cognitive loading. In henceforward studies, researches measuring the effects of flip class conditions on different variables such as students' motivation and success can be held.

**Keywords:** Flip class, cognitive load, traditional learning

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# **I Play Therefore I Am**

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Today, children are growing up together with digital nannies, have become unconscious user of technology. This technological dependency is negatively affecting their mental development, physical growth and psychological development. According to the Türkiye İstatistik Kurumu (TUIİK) 2014 data, our children are watching TV an average of 4 hours per day. The average age of internet usage is eight. This project carries the type of games that our children can play according to the agenda. This project invites our kids to the world of indoor and outdoor games that reflect our culture.

## **Project Steps**

Step 1: I set a project team (Classroom teachers, PDR Specialist, Measurement and Evaluation specialist, English, Art, Music, and Physical Education Teacher).

Step 2: The outline of the project was formed. The project was named as "I play therefore I am".

Step 3: Project, outside of the perception and understanding of conventional copier, had turned into a colorful and a childish adventure booklet.

Step 4: A study on children's awareness of the games they play outside other than the ones through the computer was made. We chose survey method for this purpose.

Step 5: The project booklet was introduced to the children and parents were informed about the project implementation stages in the parents' meeting.

Step 6: Project booklets and instructions were read individually with students and the project was initiated.

Step 7: Studies in project control date were checked.

Step 8: After the project booklets presentation made by the student, he/she was asked to play a game, which was either his/her production or the one he/she had chosen for his/her friends in the school environment.

The last page of the booklet three different project control date is written. These controls were carried out on these dates and feedback helped to progress our project in a healthy way. Being in communication with parents and the referrals also avoided disruptions.

We collaborated with related branch teachers and the parents.

The children played five old games that they had learned from adults and had their friends play. They also produced original games inspired by the old games.

We performed a second questionnaire at the end of the project and applied it to the project. The resulting data showed significant changes in the perception of children's on computer games. In addition the rubric located at the end of the booklet, self-assessment forms and scales also allowed us to make assessments about the impact of the study. Our results: Our children played outdoor and indoor games with their family at the end of this project, and this process is still continuing.

The use of information technology among the 6-15 Age Group and Media, (2013 TUIK)

At the household Information Technology held in April 2013 the scope of the study has been expanded to include children's usage 06-15 age group for the first time.

In this research based on 6-15 age group the distinction was made between (6-10) and (11-15) age group and the online time, frequency and aim of the internet and mobile phone usage along with interaction with the media were examined.

#### The Results

- ✓ Average age of computer usage starts at eight.
- ✓ Starting age of internet usage is nine.
- ✓ % 24,4 of the children have their own computers
- ✓ %60,5 of the children use computers, %50,8 use internet and %24,3 use mobile phones.

#### Basic Indicators

- ✓ %45,6 of the children uses internet almost every day.
- ✓ According the internet usage of place, home usage is at the top of the list (%65,6).
- ✓ Average age of start of usage of mobile phone is nine.
- ✓ Nine out of ten children watched TV every day.

The activities with the family members;

- ✓ Watching TV took first place at activities carried out with parents (%59.4).
- ✓ The time spend on watching TV and PC is %50 more than the time spend at school in elementary training.
- ✓ On the average at yearly basis our students spend 1000 hours at school while they spend 1500 hours in front of TV and PC.

According to the survey we spend most of our lives across the screen. In this case, unfortunately, our children, our future, who are at the age of game, who should play outdoors and spend quality time with the family, are being raised by something else other than us. Now that every household has a TV, PC, tablet, smart phone, these are growing up our children instead of us.

The subconscious with advertisements and cartoons are becoming serious interventions. The number of brand dependent, constantly bored individuals are increasing. Turkey on the average watching TB 4.5 hours daily.

The project "I Play Therefore I Am" was born as a reaction to this process. The application steps of this project, the content is constructed as a game with the students only in third grade. This project study is set outside the conventional mold and took our children on an adventure

#### **Keywords**

Digital Dependency, Games Forgotten, Culture, Media, Children, Survey

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## Loneliness and Smartphone Addiction

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Loneliness is described by researchers as a concept involving cognitive awareness of the individual on his deficiency in social and close relationships, and despair, longing or emotional emptiness reactions accompanying the awareness (Asher, Paquette, 2003; cited in, Yıldız and Duy, 2014). Peplau and Perlman (1982) perceived loneliness in the context of human relations and described it as a feeling caused by their disappointment in their existing relationships. Loneliness is not a feeling simply resulting from being physically alone (Russell, Cutrona, McRae and Gomez, 2012). One can feel lonely when around others (Rubenstein, Shaver and Peplau, 1979, cited in: Buluş, 1996).

According to Weiss (1973), loneliness is experienced in two different ways: social and emotional loneliness. Social loneliness results from the lack of a social communication network or not being a member of a group where common interests and activities are shared. This problem can be solved by getting a satisfactory social network. However, emotional intelligence is caused by the lack of commitment or the loss of attachment and in this kind of loneliness; one cannot have close and intimate relationships with others. Adolescence is described as a period when loneliness is experienced intensely. Brennan (1982) classified the reasons of why loneliness during adolescence is experienced so intensely and extensively into three categories. The predispositions like shyness, low self-esteem and weak social skills that are described as the characteristics of lonely adolescent are one of the reasons of loneliness. Another reason is developmental changes and their effect on needs and relationships. The third reason is social structures and cultural development, in other words, social status of the individual at that age.

Loneliness is described as a situation occurred due to identity crisis experienced by adolescents. According to Ericson's (1963) theory of stages of development, adolescent experience role confusion versus ego identity and isolation versus intimacy. Ericson stated that individuals feel ready to build close relationships and have commitments after establishing identity. Failure to establish a successful identity leads to isolation and loneliness (cited in: Yücel, 2009).

It can be observed that the use of smart phones is very popular especially among children and adolescents. The study conducted by Turkish Statistics Institute (2010) showed that the rate of owning a cell phone throughout Turkey is 90.5% while it is 92.8% and 85% in the urban and rural areas, respectively, which indicates that cell phones are quite common among teenagers (cited in: Şar, 2013). Despite the fact that the use of cell phones makes life easier, too much use of cell phones can cause problems that affect daily life in a negative way. Therefore, the purpose of this study is to reveal whether high school students' use of smart phones has an effect on their loneliness.

## **The Research Method**

The study is in Relational Survey Model.

### **Data Gathering Tools**

Two different scales as “Smartphone Addiction Scale” and “UCLA Loneliness Scale (ULS-8)” are used in the study.

### **Study Group:**

Scales will be applied to state and private high school students volunteered to participate in the study.

### **Smartphone Addiction Scale:**

The original Smart Phone addiction scale is developed by Known et al based on Young’s items about internet addiction and the future of smart phones. It has been adapted into Turkish by Kadir Demirci, Hikmet Orhan, Arif Demirdaş, Abdullah Akpınar and Havva Sert (2014). The Turkish version of the Smartphone Addiction Scale is a reliable and valid measurement tool for the evaluation of smartphone addiction.

### **UCLA Loneliness Scale (ULS-8)**

The adaptation of the short form of the scale has been done by Yıldız and Duy (2014). The factor analysis resulted in one factor. Factor loadings of the items varied between 0.31 and 0.71. All of the fit indices indicated a good-fit model for the ULS-8. Criterion-related validity analysis revealed that there were significant relationships between loneliness and the general belongingness ( $r=-0.71$ ), life satisfaction ( $r=-0.42$ ). The results also showed that internal consistency coefficients of the factors were highly satisfactory for whole scale  $\alpha=0.74$ . Test-retest reliability scales was found to be ( $r=0.84$ ,  $p<0.001$ ) on a sample of 64 high school students in a period of two weeks.

### **Data Analysis:**

The correlation between smartphone addiction and loneliness scores of high school students will be applied to SPSS 17.00 through regression analysis.

### **Results:**

While this changing use of technology meets our needs, it also brings out some problems. In this study, it will be examined whether the use of smartphones of high school students who are described as adolescents cause their loneliness. The question of whether loneliness causes overuse of smartphones or problematic use of smartphones causes loneliness will be discussed.

**Keywords:** Loneliness, Smart Phone Addiction, Problematic Phone Usage, High school students, Adolescents.

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# **Reviewing the Interaction of Information Technology and Education Based on a Linguistic/Constructivist Approach**

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## **1. Purpose**

The widespread and impressive role of information and communication technology (ICT) in different domains of human life, including education, and the numerous outcomes it produces has led to a necessity for philosophical consideration of the effects of ICT on human life and the goals, methods of using, and developing in the field of education (For instance: Borgmann, 1999; Dreyfus, 2009).

According to the presented discussions, the present study aims to categorize the philosophical attitudes toward the effects of ICT in shaping the human life and culture and also the human role in controlling and directing ICT and the outcomes of the philosophical attitudes for reviewing the role of ICT in education and vice versa.

## **2. Method**

The study is theoretical in nature and uses comparative analysis approach. As Erduran (2009) also indicates, theoretical and philosophical inquiries can provide the ground for deducing implications for education. So categorizing, comparing and criticizing these philosophical attitudes could lead to introducing a selected attitude on this issue which might form the basis for explaining the role and place of ICT in education and vice versa.

## **3. Findings**

### **3.1. A linguistic/social constructivist approach to ICT**

The philosophy of ICT addresses questions such as “what is the nature of ICT and how does it develop?” Regarding the same issue, Mitcham and Waelbers (2009) raise two significant questions about the philosophy of technology and ethics: “1-to what extent do humans shape technological products or processes?” and “2-in what ways do technological products or processes shape human action and perception?” (p.371). Various philosophical attitudes toward the first question, could be represented on a continuum with voluntarism at one end and determinism at the other. In a similar manner, the several and different philosophical attitudes toward the second question, could also be ordered on a continuum with instrumentalism at one end and substantivism at the other.

By adopting the two continuums, four approaches emerge: V/S, V/I, D/S, and D/I. These emerging approaches have attracted thinkers and researchers as supporters and critics (Ess, 2002).

In this way, we should search for other insights which consider the value-laden nature of ICT on the one hand and attend the cultural features in encountering with information technology on the other hand. This approach could be named as linguistic/social constructivism. This approach arises from social constructivism approach (Brey, 1997; Winner, 1983) and phenomenological/hermeneutic approach (Ihde, 1990) to technology. Accordingly, ICT is regarded as a context that mediates our perceptions and behaviors in the world. But, the

mediating role of information technology should not be reduced to mediation between human and world; rather we could say that human and the world he experiences are outcomes of mediation by ICT. On the other hand, ICT is not neutral, because in this view it is assumed as a construction that its formation and developments depend on the manner of interactions among the actors.

### **3.2. Reviewing the interaction of ICT and education**

The result of choosing a linguistic/social constructivism approach might lead to preferring free education to repressive education. In repressive education, the condition that surrounds the learner is his/her absolute fate. One of these views involves an evolutionary interpretation of ICT in which the teachers and learners are supposed to keep up with these evolutions because this is a process of growth and development and there is no other way to successful and efficient education.

But in free education the present technological condition stems from the social interpretations and choices of human and it has unbreakable relationship with ICT which provides several possibilities for different actions. In this type of education the first step is raising the learners' awareness about the current technological condition and information society.

### **4. Conclusions and Suggestios**

By accepting the linguistic/social constructivism a holistic view toward employing ICT in education is offered so the technological evolution could not be analyzed merely based on a single dimension such as technical, economical, and etc. Discussing and asking about ICT in education should not be limited to technical terminology and the relationships between this technology and the concepts such as education, efficiency, meaning of life, and the nature of social relations need to be clarified. One of the representatives of these relationships involves the ethical, political, educational, and social consequences of ICT that could be evaluated in the formation as well as application phases. So in addition to employing ICT in education the teachers and learners should be provided with the chances to examine these consequences. The teachers might attend courses on "philosophy of ICT" and the learners might participate in discussions about criticizing the present technological condition and according to the real and tangible examples (such as cultural, social, and ethical consequences of using cell phone) besides learning the computer and ICT skills. The holistic view requires the discussions to deal with positive as well as negative effects and outcomes of ICT in personal and social life.

**Keywords:** Philosophy, Information and Communication Technology, Education.

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## Quality Of Students' Arguments in an Online Argumentation Environment on a Chemistry Topic

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When science lessons are taught in a technology-assisted constructivist environment, it has been thought that this would make students be able to solve daily life problems by reaching a plausible decision. Suppose you taught your students in a technology-assisted constructivist environment, as a result you made your students be able solve daily life problems by reaching a plausible decision, then what? How could you make your students be able to use newly adopted knowledge in their daily life or how could you make your students be able to have the chance for more meaningful and permanent learning? So the purpose of this research was to design an online argumentation environment in chemistry teaching for 9<sup>th</sup> grade students to make students be able to use newly adopted knowledge and to make them have the chance for more meaningful and permanent learning.

In the research, an online argumentation environment was designed via thought experiments parallel with 9<sup>th</sup> grade chemistry program's first unit named as "chemistry as science". The research was conducted by the first author, who is teacher in a high school in Ankara, with her volunteer students in 2013-2014 educational year. While nine 11<sup>th</sup> grade students participated in the first part of the implementation in which seven thought experiments were prepared, 11 9<sup>th</sup> grade students participated in the second part related to online argumentation practices. A qualitative research design was used in the research. Before the implementation of the research, chemistry as science unit had been taught to 9<sup>th</sup> grade students in their chemistry course by using various argumentation strategies in a technology-assisted constructivist environment as given in our previous research (Köseoğlu, Tüzün and Taşdelen, 2014). So the students became familiar to argumentation and also gained problem solving skills by reaching a plausible decision. In the first part of implementation of this research, nine volunteer students from 11<sup>th</sup> grade, who had learning experiences via argumentation strategies in their chemistry class, were asked to prepare thought experiments parallel with chemistry as a science unit's targets. The students were guided by the teacher and together they prepared seven thought experiments. It was thought it would be interesting for the younger students to make them sit in front of the computer since they hadn't had a learning experience with argumentation and thought experiments. Thus, a teaching sequence was constructed with the thought experiments to design an online argumentation environment. The validity of the teaching sequence, which consisted of seven thought experiments, was checked by three qualified science educators. In the second part of the implementation, at first 11 participants, who were 9<sup>th</sup> grade students, were informed about thought experiments and Toulmin's argument pattern. Then, it was asked them to construct a blog in order to use for online argumentation. Although constructing of a blog was not very difficult for the students since their school was training them on information technology, when necessary, support was provided by the teacher. After completing the blog, the students argued seven thought

experiments via the blog when they were at their homes throughout seven hours period in two weeks. During the online argumentation, students were asked to make a decision about each of the thought experiments and then verify their decisions by using Toulmin's argument pattern's components (2003). So students reconstructed thought experiments as arguments. At the end of the online argumentation, students were asked to evaluate the online argumentation process via the blog.

Content analysis was used to analysis the data collected via the blog. Erduran, Simon and Osborne's (2004) argumentation quality levels were referred for analyzing students' constructed arguments. The students' evaluation of the online argumentation process was analyzed by qualitative method; codes and categories were constructed and then frequencies were determined. Consistency between three qualified science educators' coding and categorizing showed the reliability of the findings.

The analysis of data showed that arguments constructed by students in the online argumentation process about a chemistry topic were from each of the quality levels. Argumentation quality levels for each of the seven thought experiments were in favor of Level 1 (f: 19, 51, 41, 46, 39, 7, 10), Level 2 (f: 16, 13, 30, 21, 10, 5, 3) and Level 4 (f: 10, 18, 6, 8, 3, 0, 4) and against of Level 3 (f: 2, 5, 3, 1, 1, 0, 0) and Level 5 (f: 2, 0, 0, 1, 0, 0, 0). The students were able to construct claims or claims with either data, warrants or backings or claims with a clearly identifiable rebuttal throughout the online argumentation. Moreover, the evaluation of the online argumentation process from students' views showed that this online argumentation environment was amusing and gave the students the chance to criticize the concepts which helped them to use the newly adopted knowledge in their daily life and gave them the chance for more meaningful and permanent learning.

It can be concluded that the students were able to use newly adopted knowledge in their daily life for more meaningful learning by criticizing each other's thinking strategies in an online argumentation environment. This conclusion was coherent with Cook's (2008) research. As a result such technology-assisted teaching environments can be suggested for further studies.

**Keywords:** Technology and education, online argumentation, thought experiments, arguments.

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# **The Effects of Using Personalised Short Text Messages in Mobile Learning on Success and Motivation**

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A student who studies in multimedia software can work alone in the texts, instructions, feedback, clues and the interactions provided by the software. Therefore, Mayer (2009) points out that in terms of learning, a conversational presentation is more effective than a multimedia presentation which contains formal instruction. In a similar vein, Levert (2006) formed mobile design principles based on cognitive load and information processing theory by Clark and Mayer (2008). Based on the individual differences principle which is one of these principles, Levert suggests forming conversations with the users in mobile learning designs. In other words, it is suggested that the texts or instructions should be formed through the first or second person singular. Short message service (SMS) by nature gives the opportunity of instant messaging, which enables one-to-one interaction between the teacher and the student. A number of researchers have investigated the effects of SMS features of mobile phones on education (Thornton and Houser 2005; Markett et al.,2006; oŐgun and Özdener, 2014; Viljoen, Preez, and Cook , 2005). However, more research is needed on the effects of formal or personalized language used in this communication.

The purpose of this study is to investigate the effects of using personalization principle in the language used in short text messages on students' views regarding academic success, motivation, and use of SMS for learning purposes. In this regard, the study aims to find answers to the following questions:

1. Does the use of personalised or formal type of language in educational messages have any effects on academic success?
2. Does the use of personalised or formal type of language in educational messages have any effects on learners' motivation?
3. What are the views of learners who receive personalised message and formal message about the type of addressing used in educational messages?

This study made use of experimental model with pre-test post-test control group, one of the real experimental models. Independent variable of the study was the type of message used (personalised message or formal message), and the dependent variables were academic success, motivation and students' attitudes towards the language used in educational SMSs. The data collection tools used in the study were Personal Information Form on the Use of Mobile Phones, Prior Knowledge Test, Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich and DeGroot, 1990; Altun and Erden, 2006), and Academic Success Test. Qualitative data of the study were obtained from the participants' responses given to the attitudes questionnaire about the language used in messages.

The data were collected from 74 students who were enrolled in the Assembler Programming course in the associate degree level. The students were divided into two groups randomly. They were given Prior knowledge Test and Motivated Strategies for Learning Questionnaire (MSLQ). No significant differences were found between the groups in terms of their prior knowledge and motivation at the beginning. 22 questions were prepared for the Assembler Programming course; and the questions were sent via SMS with Mass Text Personalizer software, using a formal language in the first group and using names and a conversational (personalised) language in the second group. Students' responses were recorded. When the message delivery time was over, all the students were administered Academic Success Test and MSLQ, and they were asked to reply the questionnaire regarding their views on the use of educational short messages. According to pre-test and post-test academic success scores, the participants' academic success was found to display a statistically significant difference in favour of the group which received messages in personalised language [ $t(68.99)=2.02, p<.05$ ]. On the other hand, no significant differences were found between the groups in terms of the MSLQ and all the sub-dimensions of the scale.

One of the most important findings of the study is that according to the questionnaire results on the participants' attitudes towards the use of personalized language, 83% of the students were found to have positive views about the practice. 85% of the students who received SMS in formal language were found to observe the difference in the language used in their friends' messages. 54% of these students stated that they would rather have messages in personalized language. On the other hand, 70% of the students who received messages in personalized language realized the message diversity and only one of these students stated that he would prefer receiving formal messages. Students' statements on the language used in messages were found to support these preferences.

In light of the research findings and the related literature, use of personalization principle practice in educational short messages has positive effects on learning, and the students would like to receive messages written in personalised language.

**Keywords:** Mobile Learning, Personalization Principle, Short Message Service (SMS)

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# **The Effect of Instructional Materials of the Students' Attitudes Towards Lessons: A Study of Meta- Analysis**

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Today expectations from individuals are relation to information, evaluate the information, use the information effectively; requirement of information literateness. For this, attitude is a strong element, that should be kept high with guiding the behavior of the students (Allport, 1967: 4). Using of instructional technology actively is very important to achieve this aim (Alkan, 2011; Ekici, 2014; Fer, 2011; Gagne et al, 1992; Mayer, 2003; Uşun, 2006; Sever, 2011; Yanpar Yelken, 2012).

In Turkey, there are many studies about the subject of “Instructional Materials” to determine the effect of students’ attitudes. (Açışlı, 2010; Arslan, 2008; Ayçiçek, 2007; Çapar, 2012; Hırça, 2008; İbili, 2013; Kılınç, 2008; Kutluer, 2008; Sayan, 2010). In this respect there is an importance to find answer to “How has an effect of instructional materials to students' attitudes towards lessons?”question. Under general purpose, aimed to determine differences between effect sizes of studies’ characteristics that included to meta-analysis.

In research meta-analysis method used to determine of using instructional materials effect. Metaanalysis is statistical method to unit the similar studies’ results. Meta-analysis supply comparing of many researches, results by changing to common measure unit and also supply to account the effect size by statistical process (Cohen, Manion & Morrison, 2007; Cooper, 2010; Hedges & Olkin, 1985; Hunter & Schmidt, 1990).

The studies which included to research, formed from master and doctoral dissertations between 2002-2013 in Turkey as “Instructional Material” and own research problems and needed statistical datas. Search of postgraduate dissertations in Turkey done between the dates of 06.10.2014 and 22.10.2014 as Turkish and English from Council of Higher Education National Dissertations Centre web site. With the results of examinations the total number of will be combined of the studies in the metaanalysis has been identified as 34 studies. Study codifications done by two researchers and the reliability found %97 by using reliability level formula (Miles & Huberman, 2002). In the analysis of data, CMA and MetaWin programs were used.

In this study transaction effect meta-analysis is used in analyzing of datas. According to random effect model, general effect size of studies is 0,673 (%95 CI, SE=0,083) with 0,510 and 0,836 confidence interval. It is moderate level for Cohen, Manion and Morrison (2007) effect size classification. When we examine effect sizes of studies, it determined minimum effect size value is -0,401, maximum effect size is 1,798. When we look effect size of studies, 30 studies are pozitive, 4 studies are negative from 34 studies. With Orwins’ method to drop this effect size level (0,673) to zero (0,01), needed number of studies found 2291 which’s effect size values are zero. According to the results of research; using instructional materials

have the highest effect size values at PhD dissertations, in English and chemistry, at primary school, in written materials, at more than 30 students and more than 20 hours.

With the results and the experiment in study process in research, these recommendations to be given to practitioners, program developers and researchers:

- It identified that using instructional materials has higher effect on students' attitudes in English and chemistry. Therefore instructional materials specially can use in these fields.
- When we look instructional materials effect size on students education level, the highest effect size is at primary school level. According to that; instructional materials specially can use at primary school level to increase students' attitudes towards lessons.
- For sample size classification; instructional materials can be used more than 30 students in a class which effect size value is more higher.
- For practice time of studies; instructional materials can be used in more than 20 hours. Due to subjects time shouldn't be kept short and should allow time to students to change positive attitude.
- Written materials has a higher effect size. So written materials can be used instead of composite materials to develop attitudes of students.
- According to meta-analysis results, examining studies that have negative effect size value, it can be researched negative effect what factors caused as.
- Types of materials' effect sizes contradict to "Dale's Cone of Experiences". Reasons of that can be searched in detailed.

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# Evaluation and Assessment in the Early Social Science

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## Purpose

In this article we define the evaluation and assessment, and characteristics of it at the school subject social science in the 4th grade. We have studied: the objectives of teacher's knowledge evaluation and assessment, the frequency of use of authentic and alternative forms of knowledge evaluation, realization of regular knowledge evaluation, the teachers' ability for knowledge evaluation and assessment and also further education in this area.

## Method

We used descriptive and causal-non experimental method of empirical educational research. The research was conducted in March and April 2010, using the online questionnaire. The research was conducted on a purposive representative sample of teachers ( $n = 288$ ), who taught social science in the 4th grade in Slovenian elementary schools in the school year 2009/2010. Data were analysed with the SPSS programme on the level of descriptive and inferential statistics. We used frequency distributions ( $f$ ,  $f\%$ ) and nonparametric data ( $\chi^2$  - test). The analysis includes the comparison and the existence of differences among teachers according to years of service, professional title and popularity of teaching the subject social science.

## Findings

The results showed that teachers attributed the greatest importance to the interrelated goals of "the teacher to obtain feedback for continuous monitoring of progress in school" and "the pupils to provide feedback on the development and progress." When evaluating knowledge, from the authentic forms teachers most often choose exploring, followed by an experiment, an interview, a portfolio and a video. Among the alternatives teachers are somewhat more likely to choose simulation than projection. In practice, a summative evaluation prevails, followed by a diagnostic and then by a formative evaluation.

## Conclusions and suggestions

Teachers generally feel sufficiently educated for knowledge evaluation and assessment at the subject social science and only a third of them have until now been further educated in this field. On this basis we derive the following guidelines: more attention should be paid to the formative monitoring of learning processes and achievements of each pupil, as presented in the articles of the new draft rules on the knowledge evaluation and assessment. In the expert working groups or trainings it is required to give teachers the opportunity to practice in the use of authentic and alternative forms. Teachers are familiar with modern forms, but use traditional forms more often for ease of implementation and time economy. It is necessary to plan regular evaluation and therefore provide the pupils timely feedback on their development and progress in all areas. Curriculum reform in Slovenia with its revised guidelines requires a look at the role of the teacher. This is reflected in the creation of opportunities for pupils to shape the skills for a successful life and work in modern society. If the teacher wants to

realize this new role, they must acquire new knowledge and skills and start changing their beliefs and implicit theories associated with knowledge, which have an influence on how they teach, evaluate and assess (Sentočnik, 2004).

**Keywords:** elementary school, 4th grade, subject of social science, evaluation, assesment

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# Facebook as a Peer Assessment Tool: Does It Work in Visual Art Education?

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Teacher-centered traditional assessment approach has raised various negative effects on the development of students' learning (Adedivura, 2012). Alternative methods of assessment, including self-, peer-, and collaborative assessment, on the other hand, help students understand their own learning better (Wen & Tsai, 2006). A growing number of pedagogical and practical arguments support the use of peer-assessment in higher education (Wheater, Langan, & Dunleavy, 2005). Peer-assessment refers to the activities in which learners judge and evaluate their own products and those of their peers (Sung, Chang, Chiou, & Hou, 2005). Peer assessment provides opportunities for authentic assessment, autonomy, and collaboration (Loureiro, Pombo, & Moreira, 2012). It is stressed that main goal of peer assessment is to enhance the quality of the learning process itself, rather than offering a finalmark or evaluation (as cited in Tillema, Lennknecht, & Segers, 2011).

Currently, social networking sites (e.g. Facebook, YouTube, and Twitter) are among the most visited web sites, especially for Generation Y (Shih, 2011). Web 2.0 is increasingly used for distributed and collaborative learning (Poldoja, Valjataga, Laanpere, & Tammets, 2012). Through combining Web 2.0 technology, blended learning, and peer assessment, students are able to converse with each other, question each other, comment on each others' work and comments, and share opinions about various issues, which is aligned with the social constructivist theory (Shih, 2011). Topping (1998) anticipated the increasingly popularity of web-based peer assessment in the new century because the rapid development of Internet technologies has ushered in an increasing interest in online web learning (Lin, Liu, & Yuan, 2001). Web-based peer assessment has some advantages over ordinary peer assessment. The students make constructive modifications to their work with the help of feedback from others after participating in the online peer assessment activities (Liu, & Lee, 2013). Moreover, integrating social media (i.e. Facebook) with blended learning in higher education seems to be a feasible means for teachers to enhance students' learning (Shih, 2011).

The goal of this study was to investigate the effect of using Facebook as a platform for peer assessment in visual-art education. To this end, we analysed a group of visual-art teaching students studying at the education college of Inonu University, who regularly share and comment on the photographs of their paintings in a special group they created on Facebook.

## **Method:**

The present study employed a case study design, where the case was the practice of using Facebook as a peerassessment tool by a small group of prospective visual art teachers. A total of ten visual-art education students from Inonu University participated into the study. In order to collect qualitative data about whether and how the practice of peer-assessment via

Facebook works for visual-art students, face-to-face focus group interviews were conducted with students, and digital documents, including photographs and relevant comments on, were collected online. Obtained data through interviews and documents were analysed using content analysis with the help of NVivo10 software program.

### **Findings:**

According to the findings, most of the students had positive opinions regarding peer observation and comments via Facebook. In general participants stated that such peer assessment is beneficial, since it helps them notice their deficiencies, look at their work from a different perspective and improve their artistic skills; thanks to positive feedback their motivation and self-confidence is boosted. Participants also believed that peer-assessment on Facebook has the advantage of ubiquity, which means, without any limitation of time or space, they enjoy feedback from students from upper grades or from the art departments of other national or international universities. Participants also stressed that they are inspired by the work of other students, and more objective comments can be made online, which otherwise they might hesitate to make face-to-face.

The participants also emphasized the disadvantages of the practice of peer assessment on Facebook, which included the subjective comments (either favourable or unfavourable) biased according to the degree of friendship, and destructive comments demotivating and discouraging the students from sharing their paintings. A rather technical drawback of Facebook assessment via photographed painting was the deterioration in the visual quality of the painting, which allegedly affected the accuracy of assessment. Also some participants mentioned that feedback on a painting using words only is rather limited compared to face-to-face communication before the painting itself making use of mimes and gestures.

### **Conclusions and Suggestions:**

The results suggested that the research question “Does Peer-Assessment on Facebook work in visual art education?” has both positive and negative answers. For the investigated group, Facebook-integrated peer-assessment practice yields productive and innovative results in terms of visual-art education. Yet, there are some drawbacks regarding objectivity, technical quality, and flexibility of communication. This online peer assessment could be implemented in other similar subjects in the future.

**Keywords:** Peer Assessment, Web 2.0, Facebook, Visual-Art Education, Qualitative Research.

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# Investigation of the Relationship Between 13-18 Age Students with Internet Addiction Internet Attitudes Example of Kahramanmaras

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The purpose of this study is to examine the Internet Attitudes 13-18 age students with the relationship between Internet Addiction all sub-dimensions. Emerging mobile technologies and infrastructure investments and increasing the accessibility of Internet services by all age groups from education to entertainment, shopping has become widely used until the social environment interacts. Moreover, countries with access to information, development and technology to be integrated into the global development and conduct policies supporting the use of the internet. In addition to efforts to improve the technology literacy, personality development of young people who are at a critical stage internet behavior and the measure taken together of internet addiction and reviewed by the study will help to understand the impact on the user side of technology for policy makers is considered. In a literature search did not find a working area at the center of the current age group. Therefore, 111 Elementary School students, including 175 with one week apart while 286 individuals Internet Attitude Scale and Internet Addiction Scale was administered. A significant positive correlation was found between the variables ( $r = .337$ ). In addition, the individuals were investigated to predict how Internet Addiction Internet attitudes. In the regression analysis = 0.122 ( $p < .01$ ), respectively. This data can be said to predict individuals' internet behavior in the light of the 12% of Internet addiction. To investigate the relationship between two variables, primary and high school students are thought to be important in assessing the performance of a healthy and safe internet usage.

## Method

Quantitative paradigm and the relational model was used in this study. Along with descriptive statistics for data analysis and Chi-squared Pearson correlation formula was used. The sample of the study in the academic year 2013-2014 in Kahramanmaraş, which depends on the Ministry of Education elementary schools and 111 elementary school students studying in high school and create 175 high school students. The research universe is the elementary and high school students who are studying in Kahramanmaras. Data were collected through "Internet attitude scale" and "Internet addiction scale" is used. The validity and reliability of this survey was conducted with previous studies. The obtained data were analyzed by SPSS program.

## Results

Internet Attitude of Students with Internet Addiction is a significant positive relationship between ( $r = .337$ ), also with Internet Attitudes Internet regression analysis to investigate how is the relationship between a procedure was carried dependencies. The results of the regression analysis was found to be  $R =$  calculated as  $0.349 = 0.122$ . This data can be said to

predict individuals' internet behavior in the light of the 12% of Internet addiction. In addition to these students according to their level of education varies, these correlations.

### **Discussion Conclusions and Recommendations**

Internet Attitudes of primary school students with the studies have examined the relationship between Internet Addiction ( $r = .337, p < .01$ ) correlation coefficients were calculated. Internet addiction with Internet Attitudes of the students in the 13-18 age group in the light of these data it is possible to say that a positive significant relationship. In addition, with the Internet Attitude regression analysis to investigate how is the relationship between a procedure was carried dependencies. The results of the regression analysis was found to be  $R =$  calculated as  $0.349 = 0.122$ . This data can be said to predict individuals' internet behavior in the light of the 12% of Internet addiction. (Spring H., et al 2009) study the results of our study was similar to Snap shows. Search working in the 2007-2008 academic year in Kars province covers 208 primary school teachers. The personal information form to collect data as well as the Computer Attitude Scale-Marmara (SRS-M) and Internet Attitude Scale is used. In this study, teachers SRS-M scores were determined to be a significant predictor of Internet Attitude Scale points. The current literature is often seen in studies that measure the students' level of Internet addiction or Internet attitudes. Therefore, it is important to investigate the relationship between individuals' Internet Attitudes Internet dependencies. Indeed, to obtain meaningful data also support this conclusion. Moving to more reliable results from this research can be done on this point in order to obtain a wider audience. Working with individuals of different age groups can be expanded. Furthermore, the relationship between the different age groups the data by comparing the maturity levels of Internet Addiction Internet Attitudes is investigated with larger audiences.

**Keywords:** Internet Attitude, Internet Addiction, safe internet use, elementary and high school students.

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## **Technology Readiness of Families of Individuals with Special Needs: A Need Analysis**

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For the individuals with special needs, technology readiness of families directly affects the growth rate and quality of the individual. When the relationship of technology use of the individual and the family is analyzed, it can be seen that perspectives of families on technology directly increases the potential of the technology use of children. Yet individuals with special needs, both during infancy and middle age as well as in older ages, can have life standards depending on how much their families or their environment offer opportunities to them. Consequently, technology readiness of families has the power to directly affect the technology use of the individual with disabilities. In this regard, within the context of readiness; parents' level of income, education, knowledge on which different disability groups use different technologies, awareness stage of technology use on daily lives of parents are the factors which determine the level of technology readiness of families and these factors need to be analyzed.

While discussing the place of technology in the lives of Individuals with disabilities; as they constitute the research sample of this study, individuals with visual and/or hearing impairments should not be ignored. Individuals with visual and/or hearing impairments need to use the technology both for educational purposes and during daily activities, so they have a bigger potential to use technology when compared to other disability groups. Individuals with visual impairments have audio books, electronic magnifying glasses, audible software to express and direct them from the moment computer is on till it is off, besides individuals with hearing impairments have sound hearing aids to boost sounds, and applications of GSM companies for individuals with impairments; and these technologies make the lives of these individuals easier.

When it is examined in the scope of educational sciences, although the use of materials and generally multiple learning settings are broadly accepted and used as a means which increases the quality and duration of students' attention; they are more used in the Special Education field, and in fact sometimes they are solely used as basic instructional means. In that sense, the use of technology is useful for independent living skills as well as educational practices.

In order for individuals with special needs to have a place in the social life for themselves and to support their various learning processes, it is crucial for them to have a high quality of independent living by achieving independent living skills via using the technology both in daily living and in their education as well as improving the quality of their use of technology. However, different research studies in the special education field showed that families make the final decisions for especially the young individuals with impairments, likewise in providing the basic technology their children need. Therefore, in this study technology use of families of individuals with impairments is targeted. It is supposed that with our findings a base for the future research and educational practices will be formed on this topic. The

purpose of this study is to examine opinions of families of individuals with special needs about their children's technology use both in daily life and in education, and to identify their needs for technology use in terms of their level of technology readiness.

Besides the fact that families of individuals with impairments make most of the decisions for these individuals, another reason to collect data from families was because researchers would have difficulty to communicate with the individuals with impairments. For instance, the researchers would not be able to communicate through sign language with individuals with hearing impairments since they did not know this language.

The research was carried out by the using survey method which is a technique of individual recognition. This survey consisted of 20 questions and was conducted face to face with families. Survey consisted of 2 parts. In the first part, technology use of families that support independent living of their children with impairments was examined and in the second part families' knowledge levels of, opinions and attitudes about, and opportunities and facilities for the use technology of their children were analyzed. In both parts, in the framework of readiness for technology; families' level of income, how much they knew about technology which disability groups were utilizing, awareness on use of technology were analyzed. The research was carried out with the families of 50 students in a special education school of Ministry of National Education. For the validity of the survey questions, 2 experts were consulted for expert opinion. Data were analyzed with content analysis, percentage and frequency, and in the direction of research findings that aims to determine technology readiness of families, findings are discussed to present information to special education practitioners and to education technologists.

**Keywords:** Special education, technology readiness level, independent living skills, consolidation, educational technology

## **A Content Analysis of Intervention Research on Flipped Classroom**

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The widespread use of technology in many fields undeniably triggered development of new approaches in education. The flipped classroom as a relatively new instructional model in education has become quite popular in the last decade and regarded as an excellent approach for active student engagement and learning improvement. In this model, traditional in-class lectures are “flipped” with collaborative hands-on activities, that is; the content is available through on-line videos for students before the class hours, the class hours are devoted generally to discussion, problem solving, and applications. The expectation about this model is that the courses will be much more effective and learning outcomes will be much more achieved compared to traditional classrooms. Being a relatively new approach, having limited number of research investigating its effectiveness, and possessing high expectations to improve learning make flipped classroom literature worth to study. Therefore, this study purposes to investigate trends in the flipped classroom research, visualize general tendencies of conducted research, and so, to reveal its effect on expectations it holds. This study is unique in the sense that it is the first attempt to analyze the flipped classroom literature in terms of its effectiveness on affective and cognitive domain. The literature reports the strengths of the approach on efficient use of class-time (Cole, 2009), more active learning environment for students (Gannod, Berg & Helmick, 2008), enhancing one to one interaction between student and teacher (Lage, Platt, & Treglia, 2000), student responsibility for learning (Overmyer, 2012), and addressing multiple learning styles (Gallagher, 2009; Gannod, et al., 2008). Although, there are claims on each of these advantages, the implications for student learning and may be more strongly or weakly demonstrated depending on the specific implementation. For that reason, the present study not only seeks for the effect of the approach on learning outcomes, it will also show general tendencies of conducted research on the field.

The content analysis research design was used for revealing the flipped classroom implementation efforts. Comprehensive databases of Ebscohost (Education Research Complete, Academic Search Complete, Web of Science (Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI), Arts and Humanities Citation Index (A&HCI) with Conference Proceedings Citation Index in Science (CPCI-S) and in Social Sciences and Humanities (CPCI-SSH), ProQuest Dissertations) were searched with the keywords “flipped classroom”, “inverted classroom”, and “reversed classroom”, almost 35 academic articles and 14 theses from Pro-Quest were selected. These research studies were first categorized based on their designs as qualitative, quantitative, mixed, theoretical, and thesis. Then, a check list including the key elements those would be investigated in the studies was prepared; these elements were, country, year, subject area, research type, the method utilized, treatment verification, sample/participants, school/grade-level, gender, age-range, duration, data collection methods, data analysis, findings, inferential statistic techniques, types

of outcomes, and some other criteria. The data analysis process continued with each researcher's examination of the studies based on these key elements.

Findings obtained from the analyzed studies indicate that flipped classroom is underexplored enough in all educational grades and research designs and methodological issues are also insufficient. Specifically, it can be stated that there are no true-experimental designs among the intervention studies, majority of the studies compared students' achievement with previous semesters which are traditionally conducted. Majority of the quantitative studies do not claim that the success of the students' increases or decreases, that is, the studies lacks in making generalization. Besides, theoretical papers stress the insufficiency of studies utilizing an approved theoretical framework in their intervention studies. However, a great deal of research concludes that the approach has significant impact on students' affective domain such as self-efficacy, intrinsic motivation, perceptions, and attitudes. Figure 1 indicates how the examined studies were analyzed.

STUDY	Title	Publication type/year	Country	Research design/model	Treatment verification	Sampling method	Subject area/topic	School/Grade level	Sample size	Age range	Gender	ID	Duration	Type of outcome	How are dependent variables measured?	Type of teaching methods	Inferential Statistical Analysis Technique	Presence of Learning management system. Chat etc.	How long are the videos?
Galway, Corbett, Tairya, Frank(2014)	Anovel integration of online and flipped classroom instructional models in public health higher education.	Journal, research article, 2014	Canada	mixed-methods; survey+interviews; only flipped instruction	yes, via quiz	no-info	public health	undergraduate	11 for flipped, 22 for previous semester	no info	mixed	4	13 week	learning experiences and perceptions	pre-postsurveys on self-percieved knowledge	flipped only	percentages Compared with previous semester, Wilcoxon signed-rank test	yes,discussions, forums, peer-to-peer activities, quizzes	no info
Kettle (2013).	Flipped physics	journal, 2013	UK	comparison of flipped vs TI	no	no info	physics	last year high schoolA2	12	16-18	mixed	5	one unit	learning and opinions	multiple choice content questionsurvey	Flipped vs TI	mean percentages	Yes, Moodle, youtube	no info, from web and youtube
Kim,Patric K, Srivastava, Law,(2014)	Perspective on Flipping Circuits I.	SSI Journal, 2014	USA	comparison of flipped vs TI	yes, via quiz	no info	Circuits for EE and Compe	undergraduate-freshman in 2013 (FC)	141 at (TI), 168 in 2013 (FC)	no info	no info	6	one semester	attitude, retention, performance	exams, attitude survey	cooperation in flipped	means are compared	no info	no info
Lage & Platt, (2000)	Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment	SSI Journal, 2000	USA	no info	yes through printed slides	no info	economics	undergraduate-sophomore	190-200	18	mixed	7	one-semester	perception survey	learning styles		descriptives and percentages	no	no info
Love, Hodge, Grandjean	Student learning and perceptions in a							undergraduate				8		content understanding	3 midterms	TI,us	us		

Figure 1. An overview of results obtained from the examined studies.

The commonly mentioned advantages of the approach are, making students more responsible for their learning, efficient use of class-time, meaningful engagement of students, more active learning environments, addressing active learning styles, providing time for differentiating the instruction, and more aligned to these generation of students. The disadvantage that is commonly stated is the required time that will be allocated for previewing the internet videos. The study concludes that FC interventions are proceeding in many disciplines and the examples examined in this content analysis span from engineering to life sciences to business to statistics. As Overmyer observed, the model is useful “where content is usually more technical and linear” (2012, p.46). As a reviewing and organizing body of literature on flipped classroom, the study helps to reveal the overall picture and untouched part of the FC research for researchers and provides evidences for teachers who desire to use FC as a teaching strategy. Some of the suggestions emerged from this investigation are; researchers may conduct studies to evaluate carefully the impact of FC environment that may cause student learning, and they may design true experimental research on the topic with sufficient samples since the findings in the literature are generally anecdotal rather than data driven. Our work-

in-progress attempts will address many other issues and direct valuable recommendations for further studies.

**Keywords:** Flipped classroom, inverted classroom, content analysis, instructional intervention

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# Evaluation of a Scientific Meeting about Programming Education: The Participants' Views

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Programming is known for its complexity and difficulty. It is believed to be hard to learn and many students in programming courses might have difficulties to learn all required competencies (Ozoran, Çağıltay and Topallı, 2012). Several visual programming environments have been proposed to overcome these difficulties and recently, they are gaining more attention. Teachers should be aware of these new visual programming environments to teach programming concepts especially for beginners. In other words, some educational programs could be prepared to inform teachers about new visual environments in programming education. As an example, authors have organized a scientific meeting about programming education for pre-service Information Technologies (IT) teachers and shared their experience about this meeting process. This is a kind of seminar for pre-Service IT teachers about alternative methods and tools in computer programming education which is supported by TUBITAK. In this study, the participants' views of this seminar will be analyzed based three sub-titles:

- Educational plan in the seminar
- Academicians in the seminar
- Benefits at the end of the seminar

## Method

This study is a descriptive study. Descriptive study is a research method that presents the characteristics of the examined individuals or groups as descriptive statistical results (McMillan and Shumacher, 2010). The study sample consisted of 25 pre-service IT teachers who attended the seminar about alternative methods and tools in computer programming education in October 2014. They are undergraduate students at Department of Computer Education and Instructional Technology in 17 different Universities in Turkey. The data is collected through a questionnaire consisting of 21 five-point Likert-type questions. The collected quantitative data were analyzed using descriptive statistics (e.g., means, standard deviations).

## About Seminar

This seminar was conducted between 27 to 31 October 2014 with the support of TUBITAK's Supporting Science Education Activity Program. 25 pre-service IT teachers who came from 17 different universities attended to the seminar to train for programming education in K-12 particularly. Six instructors gave pedagogical knowledge and taught current tools' practical use for programming (For basic programming principles Scratch and Small Basic, for 3D graphics programming Alice and for Android-based mobile programming App Inventor)

## Results

Table 1 shows that almost all pre-service IT teachers who attended the seminar were quite satisfied with all activities during the seminar.

Table 1. Descriptive Statistics of Pre-Service Teachers' Views

	SD	D	N	A	SA	M	Std. D.
	%	%	%	%	%		
Educational plan in the seminar	0	2.4	9.6	28	60	4.46	.693
Academics in the seminar	0.4	4	31.2	64.4	4.60	.582	
Benefits at the end of the seminar	0	0	.66	16	83.33	4.83	.382

According to the results related to the educational plan in the seminar, 88 % of the pre-service IT teachers agreed or strongly agreed that the aim of the seminar was appropriate to the content of education and they expressed that the duration and dates of the training were well-regulated. Also, training methods and techniques in the seminar were appropriate to understand seminar topics.

According to the results related to the academics in the seminar, 95 % of the pre-service IT teachers agreed or strongly agreed that educators in the seminar have sufficient knowledge about seminar topics and they presented the seminar topics clearly and in an understandable way.

According to the results related to the benefits at the end of the seminar, 99 % of the pre-service IT teachers agreed or strongly agreed that this seminar gave them new knowledge and skills in programming education. They could use them in their teaching profession. Also, their interest and motivation to the programming increase after this seminar. They agreed that this seminar contributed positively to their personal development.

## Conclusions

As well as using technology consciously, dominating the technology and producing new technologies is the main theme of 2023 vision plan of our country. In this context, there is a qualified manpower needs in the field of information technology in our country.

Therefore, IT teachers should have the knowledge and skills about current teaching methods and current visual programming in computer programming effectively, thus, gain some skills such as critical thinking, analyzing and synthesizing ability, being able to work in collaboration etc.

When analyzing international activities for programming education, there are numerous summer camps, seminars, education and social projects that arranged for children and young people (i.e. UT Dallas Camp, ID Tech Camps, Home of Code etc.). Unlike the seminars in abroad, the quantity of education and events in our country is not sufficient. In previous years the programming camps by METU and Pamukkale University and "Computer Programming for Kids Toy Workshop" that support by Turkey Informatics Association are only two examples.

In conclusion, different activities should be organized to obtain these pedagogical and programming skills and knowledge for pre-service IT teachers and IT teachers. In this study, Pre-service IT teachers' opinions and suggestions has been determined about the seminar that is supported by TUBITAK at the end of event. Opinions held about the event were collected under three main themes:

1. Educational plan in the seminar,

2. Academics who taught throughout the event

3. Gains at the end of event

When analyzed the collected data, the opinions of the participants were quite positive. Therefore, similar activities and new areas should be supported numerously.

**Keywords:** Programming Education, Pre-Service IT Teachers, Scientific Meeting

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McMillan, J. ve Schumacher, S. (2010). *Research in Education: Evidence-Based Inquiry* (8th Edition)

# The Effect of Instructional Technology to Elementary School Students' Academic Achievement: A Meta-Analysis Study

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Using of instructional technology actively is very important to achieve aims of education (Alkan, 2011; Ekici, 2014; Fer, 2011; Gagne et al, 1992; Mayer, 2003; Uşun, 2006; Sever, 2011; Yanpar Yelken, 2012). In Turkey, there are numerous studies to identify the relation between instructional strategies use, which is prevalent in almost all teaching areas, and the academic achievement of elementary school students (Akamca Özyılmaz, 2008; Erdağ, 2011; İzgi, 2012; Turan, 2012). In this context, it is gaining importance to answer the question of “how does intruotional technology use effects the academic achievements of primary school students” by using meta-analysis method. Under general purpose, aimed to determine differences between effect sizes of studies’ characteristics that included to meta-analysis. In research meta-analysis method used to determine of using instructional materials effect. Meta-analysis is statistical method to unit the similar studies’ results. Meta-analysis supply comparing of many researches results by changing to common measure unit and also supply to account the effect size by statistical process (Cohen, Manion & Morrison, 2007; Cooper, 2010; Ergene, 1999; Hedges & Olkin, 1985; Hunter & Schmidt, 1990).

Studies will be included in research, consist of published and unpublished the master's and doctoral theses about “Educational Technologies” in Turkey between the years of 2005-2013 which have with the necessary statistical data about problems of the research and articles published in scientific journals. As a result of the literature review, 19 studies were combined with meta-analysis method. Study codifications done by two researchers and the reliability found %94 by using reliability level formula (Miles & Huberman, 2002). In the analysis of data, Comprehensive Meta-Analysis (CMA) and MetaWin programs were used.

In this study transaction effect meta-analysis is used in analyzing of datas. According to random effect model, general effect size of studies is 0,973 (%95 CI, SE=0,132) with 0,715 and 1,231 confidence interval. It is moderate level for Cohen, Manion and Morrison (2007) effect size classification. When we examine effect sizes of studies, it determined minimum effect size value is 0,219, maximum effect size is 3,947. When we look effect size of studies, all of 19 studies are pozitve. With Orwins’ method to drop this effect size level (0,973) to zero (0,01), needed number of studies found 1790 which’s effect size values are zero.

According to the results of research; using instructional technologies have the highest effect size values at PhD dissertations, in social, life science and science, at 2nd and 5th class, and at more than 20 hours.

With the results and the experiment in study process in research, these *recommendations* to be given to practitioners, program developers and researchers:

- As a result of the meta-analysis study to determine the impact on the academic success of the use of instructional technologies in primary school students, compared to traditional learning methods, it was determined that instructional technologies have a positive impact in an intermediate level on the achievements of primary school students. Primary school teachers can use instructional technology for effective learning.
- According to the study of the application period, no significant difference was found about the impact sizes on the academic success of the use of instructional technologies in primary school students. However, due to the high impact size output levels in the "20 and over" teaching hours, it can be said that instructional technologies should be used in a time period that get the primary school students comprehend and understand the issues.
- In education programmes, especially in the lessons that increase academic achievement of primary school students, it can be provided that giving wide coverage to instructional technologies and have these technologies used.
- When activities about instructional technologies in the curriculum and textbooks planned, arranging the duration to make the students efficient will increase the functionality.
- With the examination of the studies with different impact size levels, it can be tried to determine that what kind of factors impact these differences.
- If researchers particularly study about the less studied variables, the reliability of the meta-analysis results will increase and with the instructional technologies more accurate datas can be obtained.

**Keywords:** Academic achievement, effect size, instructional materials, meta-analysis.

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# The Current Visual Tools and Methodologies of Computer Programming Teaching in K-12 Education

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Computer programming is perceived as an important competence for the development of higher-order thinking skills, such as, problem solving, critical and creative thinking skills (Akpınar & Altun, 2014; Fesakis & Serafeim, 2009). Therefore, researchers recommend that programming could be thought to the students in their early ages. However, teaching programming is not easy and consists of complex and difficult set of activities. Many educators use different methodologies to overcome these difficulties such as, individual work, collaborative work and smart tools. Nevertheless, there has been a consistent decline in number of students attending computer programming courses and choosing computer science programs (Başer, 2013). For these reasons, researchers are questioning of our teaching methodologies and tools especially in K-12 education. In this study, we investigated computer programming teaching in K-12 education in regard to current visual programming tools and methodologies.

## Method

In this study, the aim is to analyze four visual programming tools (Scratch, Small Basic, Alice, App Inventor) for students in K-12 level and three methodologies (Project-based learning, Problem-based learning and Design-based learning) while teaching programming in K-12 level based on several criteria. In other words, we will compare basic properties of visual programming tools among each other's and discuss teaching methodologies while adapting these visual tools into the educational environments in K-12.

## Findings

The findings will be presented in two sub-titles.

### *Visual Programming Tools*

The most popular visual programming tools that can be used in teaching computer programming are Scratch, Small Basic, Alice, App Inventor, Lego Mindstorm, Etoys, Hyperstudio, Tynker, Codecademy, Light bot etc. In this study, researchers will focus only on four of them (Scratch, Small Basic, Alice, and App Inventor). They will be selected to address and teach four programming concepts respectively: desktop programming (Scratch), basic programming (Small Basic), 3D interactive animation programming (Alice), and mobile programming (App Inventor).

- Scratch is an educational programming environment that was developed by the Lifelong Kindergarten group in 2007 at the MIT Media Laboratory (<http://scratch.mit.edu/>).
- Small Basic is a mini programming language that was released in order to develop programming skills extremely easy in 2008 by Microsoft Corporation (<http://smallbasic.com/>).

- Alice is used to teach basic programming concepts by creating 3D graphics and Digital stories in 3D interactive animation environment by Caitlin Kelleher in doctoral studies from Carnegie Mellon University (<http://www.alice.org/>).
- App Inventor is a visual programming language that was developed as application development tool for mobile android devices by collaboration with MIT group which coordinated by Prof. Abelson at MIT University and Google in 2010 (<http://appinventor.mit.edu/>).

As a summary, Table 1 shows comparisons of four visual programming tools based on several criteria created by researchers to teach programming concepts, especially for beginners.

Table 1. Properties of Visual Programming Tools

Properties	Scratch	Small Basic	Alice	App Inventor
Freeware	+	+	+	+
Multimedia Support	+	-	+	+
Supporting Language (Turkish)	+	+	-	-
Transferred to Classical Programming Language	-	+	+	-
Interactive Environment	+	+	+	+
Open Source	+	-	-	+
Web Support	+	+	-	+
Database Support	-	-	-	+
Object-Oriented Programming	+	+	+	+

### *Computer Programming Teaching Methodologies*

In this study, researchers will focus on three computer programming teaching methodologies that are mainly used for especially in K-12 level.

Project-based learning is a model that organizes learning around projects, which have complex tasks and based on challenging questions or problems that involve students in design, problem-solving, decision making, or investigative activities (Thomas, 2000).

Problem-based learning is a model that provides students work with classmates to solve complex and authentic problems that help develop content knowledge as well as problem-solving, reasoning, communication, and self-assessment skills whereby helps students develop advanced cognitive abilities such as critical thinking, problem solving, and communication skills (Benson, 2012).

Design-based learning is a model that provides students to experience the construction of cognitive concepts as a result of designing and making individual, inventive, and creative projects, to initiate the learning process in accordance to their own preference, learning styles, and various skills to design and provides opportunities for teamwork (Doppelt and others, 2008).

### **Conclusion**

21<sup>th</sup> century students are expected to have basic skills such as critical thinking, analyzing and synthesizing ability, being able to work in collaboration, innovative and being productive. Teaching computer programming is one of the methods and techniques to gain these new century skills to the students. Recently, many researchers suggested that students should learning programming at their early age because gaining programming skills to students at an early age helps to develop some skills such as problem solving, cooperation and creativity

shortly (Maloney and others, 2010; Meerbaum-Salant, Armoni, and Ben-Ari, 2013; Ozoran, Çağiltay and Topalli, 2012). For this reason, several visual programming environments have been proposed. In this study, four of them were analyzed and the findings showed that all of them are freeware and support object-oriented programming. All of them have interactive environment. Unlike the three tools (Scratch, Small Basic and Alice), only App Inventor has database support.

In addition to visual programming tools, teaching methodologies of programming has been analyzed in this study. In the literature, the reason of researchers preferred three teaching methodologies in programming education is 21<sup>th</sup> century students' profiles and type of subjects involved were particularly appropriate for applying a student-centered methodology (Fernández and others, 2011). Common features of this methods are organizing learning around projects and performing to solve problems, on the contrary all of them have different characteristics from each other such as design-oriented, teamworking etc.

In conclusion, in teaching programming especially for K-12 level, these visual tools and three teaching methodologies are eligible and could be used extensively.

*Key Words:* Programming Education, Visual Programming Tools, Computer Programming Teaching Methodologies

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# **A Mobile Educational Application for Children with Autism Spectrum Disorder**

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Autism Spectrum Disorder (ASD) is a neurodevelopmental syndrome that is defined by unusual, restricted, and repetitive behaviors along with deficit in social reciprocity and communications [1]. There isn't any widely accepted treatment for ASD's. In spite of great improvements in early diagnosis and interventions, most children diagnosed with ASD are unlikely to live independently upon reaching adulthood. As the number of children diagnosed with autism spectrum disorders (ASD) continues to grow in our country [2], we are reminded of the needs of this community.

Language skills of children with ASD may vary on a wide spectrum. Some children may have difficulty developing language skills and following a conversation. While some children with ASD may be unable to speak, others may have rich vocabularies and be able to talk about specific subjects in great detail [3]. Their communication skills vary depending upon their social and intellectual development. In order to support their development, teaching reading to them is crucially important. Literacy programs which are based on visual learning style of children with ASD show more steady progress at their reading comprehension.

Following a rigorous and comprehensive research conducted on academic literature and software market, we conclude that there is lack of mobile educational applications designed to teach reading and writing in Turkish specifically to children with ASD. Our research objective is to develop mobile educational application software to teach reading and writing in Turkish to children with ASD. With regard to their visual learning style, Patricia Oelwein's method [4] is implemented to strengthen their comprehension through the stages of recognition, matching, selecting and naming [5]

We use tablets and smart phones as our application's environment as children with ASD show interest in experiencing them. There is also evidence that touch screens are easier to use for some children with ASD because they may have difficulties of using different physical devices such as screen, mouse and/or keyboard in coordination [6,7].

Our purpose is to design applications that are simple, that favor visualization and are inspired from/based on children's strengths. According to software development life cycle's principles, each application's development starts with an analysis phase. This phase involves studying the business processes, understanding user requirements, gathering operational data and evolving solutions for users. It also includes subdividing of complex processes involving the entire system, identification of data storage and manual processes [8]. Based on user requirements and detailed analysis, software is designed. There are several methods used in system analysis. Two of them are interviewing users and observing them during their routine [9]. As our purpose was to design an educational application, which completely met these

children's needs, we chose these two analysis methods in our study. We studied with children with ASD (aged between 10 -12), their special education teacher and their parents for three months in an Autistic Children Education Center (OÇEM) in Istanbul. We also conducted reading and writing activities in Turkish with three children with ASD by working with them one-to-one, under their special education teacher's supervision. During this period, we observed children's learning abilities, words in instructions that they can easily follow average number of repetition, style of practices and the reinforcement method with whom they are motivated. Audio-visual data were collected and interviews with special education teacher were conducted about teaching materials, their needs, and expectations from software. Through these observations, interviews and collected data, we started to write the first version of the script of language teaching application. The first script was finalized after it was revised by special education teacher. The software team has developed the application with Adobe Edge Animate [10] according to this final version.

In this paper, we will introduce our mobile educational application developed according to the principles adopted from Oelwein [4]. Although there is not one common approach from which all children with ASD benefit equally, we believe that our educational application will have a broad positive impact on this area.

**Keywords:** *Autism Spectrum Disorder, Special Education, Educational Technologies, Mobile Software*

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# Teachers' Perceptions About Nature Childrens' Seccession To Nature: A Phenomenogrphic Analaysis

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**Purpose and Significance:** The excessive and unconscious consumption and contamination of nature is significant problem for all living things that rely on it for survival, including the human race. In educational institutions, describing the concept of nature to students is of significant importance in ensuring the protection of nature and the sustainability of the human/natural world. Children who cannot adequately perceive nature cannot be expected to understand the problems facing it, or to develop concerns about nature. There are important tasks that must be undertaken by teachers to ensure children develop positive attitudes, beliefs and thoughts about nature, and acquire nature-oriented behaviour, establishing empathy with nature and adopting a nature-centred life philosophy. For this reason, understanding how nature is perceived by the teachers that are educating the future generations and who serve as a model, and identifying their views on why children are becoming alienated from nature are of significant importance in ensuring an effective education on the issue. In this regard, the aim of this research is to present how elementary school classes and science teachers perceive nature, and to attempt to understand why children are becoming alienated from nature.

**Methods:** This research adopts a phenomenographic research approach, which is a recognised qualitative research method. The aim of a phenomenographic research method is to understand the different ways people experience, interpret, understand or conceptualise a certain aspect of a phenomenon. In a phenomenographic research, data is collected through face-to-face individual interviews with the participants, and from group meetings, observations and written answers. In a phenomenographic research, rather than a standard approach, certain methodological principles are used for the analysis of data. In this regard, generally, experiences are coded first, after which explanatory themes are established, from which implications related to the unchanging essence of experience are noted. A questionnaire was applied, comprising two open ended questions, to a total of 40 teachers who participated in the research – 20 class teachers and 20 science teachers – all of whom were employed within the Diyarbakır Provincial Directorate of National Education. Of these teachers, 17 were female (42.5%) and 23 were male (47.5%).

**Results:** The phenomenographic analysis revealed that teachers defined the concept of nature in three different ways, being the physical features of nature; the place of nature in human life; and the function of nature. On the subject of the alienation of children from nature, the teachers came up with four different reasons: the diminishing of natural areas; technological developments; the test-focused education system; and social change.

**Discussion and Conclusion:** Some of the respondents defined the concept of nature as being places for relaxation, entertainment and trekking, where one is in a healthy and peaceful

environment, emphasising the role of nature in human life. The perception of nature among the participants living in urban areas, just like the majority of the population of the country, and who have an intense workload, is that nature is solely a place to go for entertaining, resting, relaxing and for picnics, which can be regarded as one of the reasons for above perception. When the research findings are examined, it can be seen that teachers do not examine and discuss the cause and effect relation regarding the alienation of children from nature. Moreover, their descriptions regarding the alienation of children from nature are rather on general information level than being scientific.

**THEME 15:**  
**Educational Administration and Supervision**

## **Evaluating the Performance Assessment Methods in Educational Organization Based on Opinions of Principals and Teachers**

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The purpose of this research is to establish the first and think about the process of secondary school teachers and administrators working in the performance evaluation. Uncovering the components of a performance evaluation model that predicted by the principals and teachers is another purpose for which you want to perform this research. Research the Ministry of Education in the performance evaluation process, managers and aims to evaluate teachers based on their opinions. It carries with a descriptive nature and direction of research was carried out in the screening model. Scan models, the past or currently existing approaches to research aiming to describe a situation as it was there. Events of the research, individual or object, as defined in its own conditions and tried to be (Karasar, 2011: 77).

This research was conducted with a descriptive approach. Data were analyzed by means of descriptive analysis technique. The aim of the current state of research has identified a working group to study reveals that the depth and with all the fine points and evaluate. This working group will provide researchers easy to transport and can be less costly to collect data from a selected region. Working group 3 the principal, assistant principal and 3 consists of 54 people, including 45 teachers.

Interviews using the data in the study, with the help of the interview form was developed by the researcher were collected by personal interviews path. For the purposes of research in the form of interviews, 13 prepared by the researchers have been given a semi-structured open-ended questions. Interviews, with permission of the person concerned was recorded from start to finish utilizing the recording feature of your mobile phone.

Data recorded interviews with the first stage of the research was transferred to the word environment. In the second stage, using descriptive analysis of the data is classified according to themes previously determined in accordance with sub-goals. Meeting records of the themes identified in the third stage was defined. The fourth and final stage described the findings described and interpreted.

Performance evaluation when the system of the comments received for the implementation of the recovery when it occurs too interviewers conducted while leaving a negative picture thought these statements can not be generalized to other schools, but working in the same area 54 people in it is upbeat than most people's School Administration Panel but replacing the belief that the issue can not be resolved the problem with the implementation of the system proved to be very difficult.

Literature, performance evaluation process consists of six basic steps. Accordingly these steps: identification of preparation and criteria of the valuation environment, determining the valuation standards, determining the valuation period, determining the valuer and education, the implementation of the valuation method is the feedback of evaluation results (Farmer,

2007). When the interviews evaluation of this stage in the evaluation of teachers' performance is almost none appeared not apply.

In the literature, many performance evaluation method is specified. When today's schools in 360 degree feedback approach developed in the framework of multiple data entry based performance evaluation indicated for the method opinions are analyzed and methods of the person next to the self-assessment, asthma, upper from, Learn the processes relating to the performance of the equivalent of the customer (Uyargil, 2010) that the lack Given the definition It is understood. Also started this process in order to benefit effectively from the process according to this approach, and in the center of the process of finding an effective assessment tool, and should first implement it (Uyargil, 2010). However, none of the 56 interviewees did not mention that they made the application to develop an effective assessment tool.

According to Luecke (2008), a meeting should be scheduled with the participation of those evaluators at the beginning of the performance evaluation process and evaluation. Parties in this meeting, the definition of performance then state their views. Then the good and bad performance is defined and criteria regarding the expected performance from them should be forwarded to the assessor. Considering the results obtained from the interviews in the study working in schools in the performance evaluation of teachers and administrators have complained that they were aware of the meetings did not mention this style and criteria. In this way, school principals and managers interviewed were unaware of a process that should be planned in the help. The system has already been seen that examined the legal aspects of such a space.

Some of the components in the development and quality at the same time a proposal data obtained as a result of interviews with teachers and administrators who participated in the research as a result of the study by researchers at the light for a performance evaluation model can be applied to teachers is stated as follows:

- 1) Should be planned in advance by hovering together with the teachers and the process should be conducted in a systematic way,
- 2) Teachers should be aware of the purpose of the process,
- 3) The definition of good and expected performance should be done,
- 4) The process should be long-term and objective,
- 5) The process should be carried out by those skilled in the proven,
- 6) Teachers should be taken as a whole,
- 7) Process the end of reward, punishment and incentive systems should be developed.

**Keywords:** Performance Evaluation System, Human Resource Management, Training Organization

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## **Some Reforms in Secondary Education and its Inferences for Turkish Secondary Subsystem in the Knowledge Age**

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This report aims to represent certain reforms of secondary education (standards movement, small schools, career academies, comprehensive school reform movement, and so on.) that are universally accepted on a large scale, and afterwards to discuss what kind of inferences of these reforms might be (about objectives and policies, restructuring, student achievements, curriculum, school administrator training and so on.), particularly for Turkish Education. The report is largely based on the resources of transnational or multinational organizations such as UNESCO, OECD. In this paper, secondary education system is taken as a basis which is perhaps the critical link of the education system. Unfortunately, in current situation, secondary schools in the world are unable to prepare students according to the requirements of the 21st Century in general. Many students lack the skills necessary for success in higher education or in their career after secondary education. Some of them leave school, and some are in disadvantaged situation due to insufficient skills. The business world assesses secondary schools graduates as they lack of skills and fail in readiness for work. For example, according to a research in the United States, 6.2 million people between 16 and 24 years left from high school; and half of them found the classroom as boring, dull and irrelevant teaching to the high school education, consequently they did not find the class interesting. All in all, in the United States from all OECD countries, it has been determined that younger generations have lower success levels than older generations in high school or equivalent, and only one of four students is ready for college (U.S. Workforce, 2009).

There are many reasons behind that most of secondary schools fail to prepare students for the 21st century requirements, and many schools can't prepare students for expectations, assessment, educational programs, and for learning environments, neither successfully prepare them to compete in the global economy. The absence or shortage of qualified teachers, that curriculums don't include necessary skills for business world therefore, that students fail to gain 21<sup>st</sup> century skills, skills gap between students and failure are some of those reasons. K-12 schools, unfortunately, fail in terms of academic knowledge, academic skills and technical skills. However, these skills are equally valuable for innovative, creative societies. Since all students could get ready for 21<sup>st</sup> century requirements, it is needed to provide policy, program and fund to integrate academic, technical and 21<sup>st</sup> century skills. It is also needed to supply in-house substructure and programs. It should be taken the lead for integrating academic, technical and 21<sup>st</sup> century skills into the educational programs (*U.S. Workforce*, 2009). In conclusion, the requirements of the era include these skills, in the 21st century learning framework for all students can be summarized as follows ( Partnership for 21.Century Skills):

- Global awareness
- Financial, economic, business and initiative literacy,
- Civilization (civil) literacy,
- Health literacy,

- Environmental literacy,

In a study, the skills required by employers are listed as follows according to the priority (*U.S. Workforce, 2009*):

- Critical thinking and problem solving 92%
- Ethics and social responsibility, 71%,
- Professionalism / business ethics, 70%,
- Creativity / innovation 69%,
- Lifelong learning / self- [governance](#) 64%.

It seems that the four skills are supported by educators, the local authorities and employers. These ones are critical thinking and problem solving, communication, collaboration, and creativity and innovation skills. Besides these, in addition, employers expect that industry-specific technical skills are to be gained before working.

Secondary education system in accordance with the requirements of the era's purpose and mission, should foresee policies and goals to gain the skills mentioned. Therefore, the content of the educational program should be converted into a content that students acquire necessary academic, technical and century skills. The training of teachers who are the main actors of the acquisition of these skills to the students must also undergo a change. Teacher training programs must undergo a transformation both in skill areas required by this age and in the pedagogical teaching styles and methods. Structuring an appropriate school is also needed so that teachers can create a professional learning community, be motivated for teaching and learn continuously. The central school structuring and management, the creation of an appropriate learning environment, and in this context teachers and students' continuous learning status are not enough anymore for a school to be a learning organization according to the findings of effective school and school improvement and research (Balci,2015).

Therefore, it should be an evolution over school structuring to decentralization; school administrators must be equipped with certain powers withheld from them. However, it should be noted that the decentralization needs to be implemented within the framework of plans and programs which head office set. In this regard, training school administrators is especially important. School administrators should be trained as an instructional leader above all. Training of the administrators should be valued to create a professional learning community in the school, supply a suitable learning environment for teachers and especially for students. Accordingly, in this report, possible implications will be trying to achieve from these developments on the various aspects of the secondary subsystem of Turkish Education System. As it is understood, the report aims for contributing to the policy makers and practitioners of educational administration, curriculum, teacher training and manager training.

**Keywords:** Secondary education reforms, the skills for students, inferences for Turkish Education System

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# Evaluation of Prospective Teachers' Attitudes toward Democracy and Multicultural Education

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Multicultural education (ME) is structuring the education in according to equality, equity, mutual respect, recognition, the principles of moral commitment and pluralism to achieve democratic ideals, to meet the needs of different groups within a society, to ensure social justice (Polat, 2009). ME provides academic success for all students and prepare all young people to become citizens of a democratic pluralistic society (Gay, 2003/2004). A teacher's behaviour in the classroom is a key factor in helping all students reach their potential, regardless of gender, ethnicity, age, religion, language, or exceptionality. (Sadker & Sadker, 1978). Attitudes of teachers' toward any subject affect willingness, application skills about these practices (Berry, 2010). Present study investigated prospective teachers' (PT) attitudes toward democracy and ME and whether their attitudes toward ME differed according to various demographical variables. Data were gathered through the "Democracy and Multicultural Education Scale (DMEAS) that made up of five sub-scales and developed by Toraman at al (2015) and one open ended sentence "According to me ME is..." Gathered data analyzed by using descriptive analysis, arithmetic mean, standart deviation and non parametric tests. Results indicated that PT' attitudes toward "democracy education(DE)" and "democracy" were "very positive"; their attitudes toward multiculturalism, "ME" and "unprejudiced attitude to ME" were "positive". In addition, it was determined that PT' attitudes in whole sub-scales of DMEAS did not differ significantly according to their gender, their parents' education level, living region and population of their living city. Also, primary school PT and formation program students had significantly high positive attitudes toward "multiculturalism" than science PT and physical education and sport PT. According to descriptive analysis results it's understood that PT came into contact with very important themes about ME.

**Purpose and Significance:** The primary purpose of the present study is to examine the democracy and ME attitudes of prospectives teachers who are students in different departments of Giresun University Hüseyin Hüsnü Tekışık Education Faculty to determine whether prospeptive teachers' attitudes toward democracy and multicultural education differ according to various demographical variables including gender, department, their parents'educational level, living region and population of their living city. And also while they are defining which themes they use. The gap in the literature on the democracy and ME attitudes of the teachers is the main reason of the current study.

**Method:** The present study is mixed method study:quantitative and qualitative methods were used together (Green, Krayder&Mayer, 2005:). In the survey 475 PT who were mostly final year and graduate students in education-faculty voluntarily participated in the study. Data were gathered during the 2014-2015. The validity studies showed that the instrument includes five factors as its original. In addition, the Cronbach alpha coefficient of the instrument as whole is .87. For the present study, alpha value was .87 for whole scale and .85, .78, .81, .70, .66 each factor respectively. It's decided that the DMEAS could be used as data gathering instrument. The data were analyzed with content analysis, arithmetic mean, standart deviation

and non parametric tests by SPSS 19.0., significance level was .05. For qualitative data concept map that developed by Toraman et al and Bennett's (2001) ME Frame was used during coding by two different researcher. Harmony between the two encoders is 87%.

**Findings and Discussion:** Participants' attitudes toward democracy and ME were positive. This finding supported the similar study results (Özdemir, Dil, 2013; Ponterotto et al, 1998). It's found out that attitudes didn't differ according to gender, parents' educational level, living region and population of their living city. It's seen that teachers who are in social science teacher program and primary school teacher program had significantly high positive attitudes toward "DE" and "democracy" than the others. Also, primary school PT and formation program students had significantly high positive attitudes toward "multiculturalism" than science and physical education and sport PT. According to descriptive analysis results, while PT defining the aim of the ME, they stressed "ensure cultural diversity", "provide education for all"...They thought ME develop "tolerance", "acceptance"...They defined "language", "religion", "culture", "ability/disability" as variables. They thought, ME includes "diversity", "pluralism"...To do ME "curriculum adaptation", "equity pedagogy=adaptation of cultural styles in teaching-learning", "multicultural competence" needed. Very limited number of PT thought that ME caused "segmentation", "polarization". These findings did not support the similar studies like Ford & Quinn (2010), He & Cooper (2009), Mosley and Rogers (2011).

**Keywords:** Democracy education, multiculturalism, multicultural education, teachers' attitudes.

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## The Student Club's Role and Participation in the Student Affairs Tasks : Thailand

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This research aimed to investigating the Student Club's appropriateness role and participation in the Student Affairs tasks. To presenting the reality of the performance level of the Student Club's role and participation in the Student Affairs tasks. And to recommending the way to encourage the Student Club's role and participation in the Faculty of Education's Student Affairs tasks at Nakhon Ratchasima Rajabhat University. The findings would be use as guidelines or policy to promote the Student Club's role and participation in the Faculty of Education's Student Affairs tasks at Nakhon Ratchasima Rajabhat University. The research area is a case study of Nakhon Ratchasima Rajabhat University, The University is in the North Eastern of Thailand. The conducting of this research was done in three phases : 1) The first phase, to investigating the Student Club's appropriateness role and participation by using documentary analysis and synthesis in order to present the appropriateness of the role and participation in the Faculty of Education's Student Affairs tasks, and then focus group to confirm the appropriateness of the role and participation from key information consisted of : A) the Dean of the Faculty of Education, B) the Deputy of the faculty of Education, C) the lecturer in the division of Student Affairs, D) the staff of the Student Affairs Department, and E) The staff in the Student Club were included in the focus group's concluding form. 2) The second phase, to presenting the reality of the performance level of the Student Club's role and participation in the Faculty of Education's Student Affairs tasks. The population in this study consisted of 383 staffs in the Student Club's Department, the sample size was 196 staffs in the Student Club's Department, there were assigning by Krejcie & Morgan's table (Wanee Kaemkate , 2008: 283). Collecting data by using questionnaire as the rating scales. 3) The third phase, to recommending the way to encourage the Student Club's role and participation in the Faculty of Education's Student Affairs tasks through interview method. Five key informants consisted of : A) The president, B) the Vice president in the Student Affairs Division, C) The Dean of the faculty of Education, D) the Deputy of the faculty of Education, E) the lecturer in the division of Student Affairs were included in the semi – structured interview.

The result finding: the Student Club's appropriateness role and participation in the Faculty of Education's Student Affairs tasks at Nakhon Ratchasima Rajabhat University consisted of: 1) the appropriateness role were, **The Socially Prescribed or Ideal Role:** An order appointing the executive committee and student clubs. Specific duties of each position clearly. It will be a meeting to clarify the perception of their role, as well as guidelines for the role, **The Perceived Role:** Every director role performance of their duties perfectly and cooperation between the various parties to a mission-driven efforts. And to promote cooperation and facilitate the study and all students in the Faculty of Education in joint activities, and **The Performed Role:** Role in planning the operation. Role in the preparation of work. Role in the implementation of various activities. Role in assessing performance. And the role of reflection, 2) the appropriateness participation were, **Participation in the review of the work plan:** Have the opportunity to discuss their own ideas at the conference. The opportunity to criticize or support or oppose the opinion of others. A referendum or vote have

the opportunity to accept or reject. The opportunity of meeting results. **Participation in the preparation of work:** Chances are the project leader. Chances are the Operations Committee. The opportunity to cash out. The opportunity to help decorate the place. The opportunity to help prepare materials. The opportunity to liaise with relevant persons. The opportunity to help promote. **Participation in the operations or activities:** Duty by order of appointment. To cooperate with other parties to work. The cooperation between the parties to work. Work together happily. To use their ability to function fully. Volunteer to work willingly. **Participation in the evaluation of the operation:** Have the opportunity to comment on the performance verbally. A chance to evaluate the performance evaluation using the event. An opportunity to appreciate or criticize the work. Presents a report on the event in the form of documents or information. **Participation to reflect the results of operations:** Are invited to attend the activities. A brainstorming session on the results of operations. Have the satisfaction of the event. Presented success and suggestions on how to improve next time. The results of the event in the form of information is all in the planning of the next session.

The reality of the performance level of the Student Club's role and participation in the Faculty of Education's Student Affairs tasks at Nakhon Ratchasima Rajabhat University were, The height level of the role is The Socially Prescribed or Ideal Role and the low level of the role is The Perceived Role. The height level of participation in action is the participation in the review of the work plan and the low level of the participation in action is the participation in the operations or activities.

The way to encourage the Student Club's role and participation in the Faculty of Education's Student Affairs tasks at Nakhon Ratchasima Rajabhat University consisted of: 1) to design the participatory projects between The Student Club and the Student Affairs task. 2) the Participatory Meeting between The Student Club and the Student Affairs task 3) Training and practicing the working skills for students. 4) to working based on Participatory Action Research and 5) To reinforcement the inspiration for the students.

**Key Words :** the Student Club, role and participation, the Student Affairs tasks

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# Neoliberal Policies in Education and its Affects in Turkey

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The discourses and practices of neoliberalism, including government policies for education and training, public debates regarding standards and changed funding regimes, have been at work on and in schools in capitalist societies since at least the 1980s. Yet we have been hard pressed to say what neoliberalism is, where it comes from and how it works on us and through us to establish the new moral order of schools and schooling, and to produce the new student/subject who is appropriate to the neoliberal economy. (Davies, Bansel, 2007:247). In the 20<sup>th</sup> century with the world crisis, liberalism, which had had a huge influence upon the states all over the world, revealed the interventionist state policies and raised the needs to restructure state itself in economic and political areas.

When Apple (2006:25) is drawing up the grounds of neoliberalism, he is talking about a “panic” over falling standards, dropouts, and illiteracy; the fear of violence in schools; and the concern over the destruction of traditional values have had a major effect and have led to attacks on teachers and teacher unions and to increasing support of marketization and tighter control through centralized curricula and national testing. He claims that if we do not find ways of connecting educational efforts to local communities, neoliberal definitions of democracy—ones based on possessive individualism, where citizenship is reduced to simply consumption practices—will prevail.

When it comes to Turkey, the state control policies had been implementing until 70s with some issues such as inflation, exchange bottle-neck, terrorist acts, labor and political instabilities caused the need this restructuring process. After 1980 in Turkey, political instability and social problems in the economy have generated the neo-liberal transformation. In this paper, it has been focused the concept of neoliberalism, neoliberal policies and its reflections in education and trying to get some points which have been discussing by the educators and policy-makers since the neoliberal policies were started to implement in Turkey.

## Method

*In this study, document analysis method was used as a qualitative research method. The document analysis includes the analysis of written materials that contain the information about target facts (Yıldırım and Şimşek, 2011, s.187). After the literature review had been conducted, related resources and the data were reached regarding the research subject. Related books, documents and reports were examined and obtained data were combined systematically. Finally, it was made an assessment by correlating the findings each other.*

## Findings

Throughout history, actually every society has been undergoing change fast or slowly because of the changes or developments occurring in social, economic, cultural, technological and political areas. Turkish government has undertaken market reforms without comprehensive

reform for the last three decades. In Turkey, the Economic Recovery Program that came into effect on January, 24 in 1980 is considered the turning point for economic and social transformation. After the decisions made on this date, reduced public responsibility in the economy and transfer to market economy were greatly accelerated and the provision of social services such as education, health and social security was shifted from the public to the private sector. In 1980s, there were significant thought shifts in cultural, economic, social and political areas. These changes have raised the question if different applications can be used in education system. In addition to this, by transferring the state's commercial activities to the private sector, people started to discuss if it is possible to transfer educational activities to private sector (Yirci, Kocabas, 2013:1524). According to the analyzed data, there are some major fields of neoliberal policies which have been implementing in Turkey. According to Polat (2013:161), privatization and commercialization methods of education in Turkey can be summarized into these 5 major fields. They are; load shedding method, central/competitive tests, private courses, the voucher method, contracting and franchising methods and we can add another development which has begun to implement since 2014 is financial assistance for private school enrolment.

### **Conclusions and Discussions**

With the neoliberal liquidation, state structure has fallen behind in terms of public functions and is being restructured with the new power of economic activities and organizational style. Within this framework, a state model, which is being marketization and equipped with new functions, has revealed. From this point of view, neoliberalism is degrading the individuals into economical equipment and making the educational systems into profitability of capital which is very much away from the real cause of education. The main purpose of individual capital benefit is to take the society into the best location for sure but when it comes to core education and the results of these policies there appears a tremendous gap between the social and the individual capital benefit. If education is obtained as a commodity in the market process, it is inevitable that only those who have purchasing power will use that commodity.

**Keywords:** Neoliberalism, neoliberal policies, neoliberal discourse in education.

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## What Makes Difference for Disadvantaged Students?

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Education plays a vital role in promoting social mobility and ensuring that children's future is not determined by the socio-economic background of their parents (OECD, 2010a, p. 79). But still, social disadvantage remains a major barrier for social mobility (Pisapia and Westfall, 1994). Numerous studies indicate that there is a significant association between student's socio-economic background and their academic performance at school (Bartley, 2006; Gary, 1999; Hanushek, 2010; Hanushek & Woessmann, 2010; Lacour & Tissington, 2011; Maughan, 1988; McCoy, 2005; OECD, 2011; UNESCO, 2006). Resiliency has been the subject of study in both psychology and education fields and various definitions related to resilience have been proposed in the literature. Generally the educational research literature calls resilient students the ones who overcome adversity to achieve academic success and they perform well in spite of their disadvantaged backgrounds. Resilient student means that they beat the socio-economic odds stacked against them and exceed expectations when compared other students in their country.

Schools are the places where most learning happens, so what happens in school has a direct impact on learning. In turn, what happens in school is influenced by the resources, policies and practices (OECD, 2010, p.13). At-risk students, resilient students need support in all areas of their lives, including their academic lives. It is undeniable fact that school which have developed a supportive climate, increase the chance that disadvantaged students develop important positive personality which enable them to successfully complete their education and become productive citizens (Pisapia and Westfall, 1994).

PISA data show that some 25% of disadvantaged students across OECD countries are "resilient", this illustrates that they beat the disadvantaged of socio-economic background. PISA also provide powerful evidence that education and social policy can have a significant impact on individual resilience to reinforce their capacity to take advantage of the circumstances available to them and to adapt when these circumstances change (OECD, 2014). Still in the educational literature it has been recognized that a few of the research have looked specifically at disadvantaged and resilient students, there are not so many researches investigated these students profile in detailed.

**Purpose:** The study aims at describing resilient students and socio-economically disadvantaged low achievers among 15-year-old students participated in PISA in 2012 in Turkey. This study will provide a rich descriptive picture of resilient students and disadvantaged low achievers across Turkey based on student reports related to their school including the factors such as sense of belonging to school, attitude towards school, their learning outcomes, their learning activities and perceived control of success in school. By identifying the perception and attitudes of the resilient students and disadvantaged low achievers towards their school, the research will provide new insights into how educators, school administrators, policy makers and parents can better support disadvantaged students and help them to succeed in school. This may also result in decisions and strategies which enable schools to provide climates that support the developing of resiliency in at-risk students.

**Method:** The target population of this study consisted of 15-year-old students. Sample of PISA 2012 Turkey consist 4848 students who were chosen randomly from 170 schools in 12 statistical regions (NUTS). The rate of resilient students and disadvantaged low achievers will be calculated among 15-year-olds participating in PISA 2012. The data of these students will be analyzed and the findings will be given via frequency and percentage. Within each country via PISA assessment, students were separated into three performance categories – low, middle and high achievers – and into three socio-economic groups – low, middle and high socioeconomic background. These two sets of categories were combined to identify disadvantaged low achievers and resilient students. The study identifies students as resilient if they belong to the bottom third of the socio-economic background distribution in their country and to the top third of the achievement distribution in terms of mathematics performance. In other words, resilient students come from disadvantaged backgrounds yet exhibit high levels of school success. In the study, students are identified as disadvantaged low achievers if they belong to the bottom third of socio-economic disadvantage and their achievement scores place them in the bottom third of the achievement distribution in their country. Disadvantaged low achievers are a group of students that share a similar socioeconomic background to resilient students but whose members are among the lowest performers in the PISA mathematics assessment (OECD, 2011, p. 175-176).

**Keywords:** Resilient students, disadvantaged low achievers

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# **The Research of the Relationship between Innovation Management Competencies of School Administrators and Organizational Communication**

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The aim of this study is to determine the relationship between innovation management competencies of school administrators and organizational communication. With this aim these questions are looked for an answer in research:

1. What is the level of teacher's perceptions about innovation management competencies of school administrators and organizational communication?
2. According to teachers' perceptions, is there a meaningful relationship between innovation management competencies of school administrators and organizational communication?
3. Do innovation management competencies of school administrators predict organizational communication in a meaningful level?

## **Method**

This is a study at screening model. The study is carried out with primary school teachers that work primary schools of ministry of education in Erzurum in 2013-2014 school year. The sample of the study consist of 232 teachers that work in 15 different primary schools and these teachers are determined with simple accidental sampling method "the scale of innovation management competencies of school administrators" Ak (2006) and "communication scale" which is improved by Celep (2000), whose validity and reliability is made by Yetim (2010) are used in collecting the data of the study. In order to calculate the relationships between factors in the study, pearson product-moment correlation coefficient ( $r$ ) and with the purpose of determining the levels of regression dependent variables of independent variables multiple linear regression analysis are done.

## **Findings**

It is seen that there is positively a meaningful relationship between the determination extent the innovation need at school of the scale about innovation management competences of school administrators and the extents of organizational communication such as mission

related communication( $r=-.57$ ,  $p<.01$ ), information related communication( $r=-.66$ ,  $p<.01$ ), feedback( $r=-.63$ ,  $p<.01$ ) and attitude behaviour related communication( $r=-.73$ ,  $p<.01$ ).

Determining the need of innovation at school ( $B=.161$ ,  $p<.01$ ), preparing the school to innovation process ( $B=.404$ ,  $p<.05$ ), evaluating the innovation ( $B=.118$ ,  $p<.05$ ) extents of innovation management competences of school administrators' scale predicts positively and meaningfully teachers' perceptions who attend this study about organizational communication scale's mission related communication extent.

Determining the need of innovation at school ( $B=.191$ ,  $p<.01$ ), preparing the school to innovation process ( $B=.397$ ,  $p<.01$ ), implementing innovation at school ( $B=.186$ ,  $p<.05$ ) and evaluating the innovation ( $B=.118$ ,  $p<.05$ ) extents of innovation management competences of school administrators' scale predicts positively and meaningfully teachers' perceptions who attend this study about organizational communication scale's information related communication extent.

Determining the need of innovation at school ( $B=.251$ ,  $p<.01$ ), preparing the school to innovation process ( $B=.292$ ,  $p<.01$ ), evaluating the innovation ( $B=.116$ ,  $p<.01$ ) extents of innovation management competences of school administrators' scale predicts positively and meaningfully teachers' perceptions who attend this study about organizational communication scale's feedback extent.

Determining the need of innovation at school ( $B=.301$ ,  $p<.01$ ), preparing the school to innovation process ( $B=.355$ ,  $p<.01$ ), implementing the innovation ( $B=.201$ ,  $p<.01$ ) extents of innovation management competences of school administrators' scale predicts positively and meaningfully teachers' perceptions who attend this study about organizational communication scale's attitude and behaviour related communication extent.

### **Conclusions And Suggestions**

According to research conclusion, there is a meaningful relationship between innovation management competence of school administrators and organizational communication positively. This finding can be commented that when innovation management competence of school administrators increase, organizational communication level gets higher.

School administrator, who plays a part in innovation management actively, obtains achieving goals by effecting organizational behavior and also this effort gets higher performance at point of personal and productivity at point of organization. It mustn't be forgotten that adequate communication always will gain successful performance. According to regression analysis results; when task-directed communication and feedback point of organizational communication, point of applying innovation are not separately prediction of task-directed communication of organizational communication.

The determining need of innovation, preparing innovation process and evaluation of innovation are point of scale of innovation management competence of school administrators'. These points predict positively informative communication point of organizational communication for teachers in research.

The identifying need of innovation, preparing innovation process and evaluation of innovation are point of scale of innovation management competence of school administrators'. When these points predict teachers' perceptions positively about attitude and behavior based

communication point of organizational communication, evaluation point of innovation doesn't predict meaningful and separately behavioral point of organizational communication.

**Keywords:** Change, Change Management, Organizational Communication

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# Developing Teachers Instructional Leadership Behaviors Scale

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The leader is the person who can impress his audience (Northouse, 2013). The effectiveness of educational system mostly depends on the skills of the teachers who are the leaders of their classrooms. From this point of view, the behaviors and the leadership of the teacher has a key role in conducting the classroom activities (Buyrukçu, 2007). Considering that the focus of instructional leadership is on the facilitation of learning, the instructional leadership behaviors of teachers who plan, practice and evaluate the classroom activities are crucial. In addition, the leadership of the teacher is important for directing the students' behaviors as well as instruction (Çelik, 2002). In this sense, measuring the instructional leadership will help teachers become aware of their leadership, organize the instructional activities appropriately and direct the behaviors of students. With all of these benefits in hand, developing a scale to determine the instructional leadership of teachers constitutes the goal of this study.

## Method

The population of this research is composed of the senior students of Faculty of Education of Gaziosmanpaşa University, Çanakkale Onsekiz Mart University and Düzce University. The sample of the research is composed of 237 students and they were determined by convenience sampling method.

The data collection tool was developed by three researchers. The common and the same items were excluded from the three item pools. Afterwards, the items were sent to two linguists so that they could be examined in terms of readability and understandability. The items that had ambiguity, didn't correspond to what was aimed to be measure or had several meanings were either corrected or excluded in accordance with the expert opinions before the conduct. As a result, "The Instructional Leadership of Teachers Scale" had 46 items and six dimensions: "Supporting and Developing Students" (SDS), "Classroom Environment" (CE), "Resource and Time Management" (RTM), "Communication" (C), "Assessment and Evaluation" (AE) and "Field Knowledge" (FK).

Since the items were written in accordance with the related dimensions, Confirmatory Factor Analysis was conducted using LISREL in order to determine whether the structure of the scale was consistent. The following indicators were used to assess the analysis results: Normed Chi-Square ( $\chi^2/sd$ ), Root Mean Square Error of Approximation (RMSEA), Goodness

of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Standardized Root Mean Square Residuals (SRMR), Comparative Fit Index (CFI) and Normed Fit Index (NFI).

## Findings

The reliability of the scale was examined by internal consistency method. The Cronbach Alpha internal consistency coefficient of the scale was between 0,87 and 0,94. The Cronbach Alpha internal consistency coefficient of the scale as a whole was 0,98. The goodness of fit of the developed theoretical model was determined by CFI, NFI, GFI, AGFI, RMSEA, SRMR  $\chi^2$  and  $\chi^2/df$  ratio. The GFI value for the model of this study was calculated as 0.72. AGFI value was calculated as 0.69 similar to GFI. On the other hand, RMSEA value was calculated as 0.06 and  $\chi^2/df$  ratio as 2.12. When the DFA t values of the scale was examined, it was observed that all of the ways between the observed variables and unobservable variables were significant ( $p < .05$ ).

The Chi-Square value of the model was  $\chi^2=2067,19$   $sd=974$ ,  $p=0.000$ .  $\chi^2/sd$  value was 2.12. RMSEA value of the model was calculated as .069. The other indexes were; CFI=.98, NFI=.97, GFI= .72, AGFI= .69 and SRMR=.049. When the standardized values were examined, the factor loadings of SDS were between 0.63 and 0.87; CE were between 0.71 and 0.87; RTM were between 0.68 and 0.85; C were between 0.65 and 0.84; AE were between 0,57 and 0,82; and FK were between 0,70 and 0,85.

## Conclusion and Suggestions

As a result of the analyses, a valid and reliable scale composed of 46 items and 6 dimensions was obtained. During the development process, since the items were written in accordance with the dimensions from the literature, the confirmatory factor analysis was performed. The goodness of fit indexes were at acceptable level. The literature asserts that when the GFI, AGFI, NFI, NNFI and CFI values are above .90 and the RMSEA and SRMR values are below .10, the model demonstrates a good fit (Kline, 2011; Tabachnick and Fidell, 2001). It was observed that the NFI, NNFI and CFI values were quite above .90 but the RMSEA, SRMR, GFI and AGFI values were below the limits in the literature. On the other hand, the literature assert that a  $\chi^2/sd$  ratio higher than 2 shows that the model exhibits a good fit and that between 2 and 5 shows that it is acceptable (Kline, 2011; Sümer, 2000). The  $\chi^2/sd$  ratio of 2,12 for this study shows that the model is acceptable. Therefore; it can be expressed that the instructional leadership scale exhibited a good fit for this particular study group.

The studies on instructional leadership up to now don't have a scale which directly measures the instructional leadership of the teachers only. In this study, since a data collection tool which measures the instructional leadership behaviors of the teachers in accordance with the perceptions of the senior students who go to schools for observations as part of their courses, it can be said that the scale has a unique characteristic. In conclusion, it is considered that the instructional leadership scale developed in this study can contribute to the field since it has sufficient psychometric properties and it can be used in other studies.

**Keywords:** instructional leadership, teacher, developing scale

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# The Organizational Citizenship Behaviors Demonstrated by Teachers Who Work at Primary Schools in Villages

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Such features of organizations as flexibility, productivity and adaptation to changing environment are becoming more important within today's competitive atmosphere. Therefore, the improvement of employees' conduct related not only to their formal duties, but also to their informal duties within business life has become a necessity for organizations to continue their existence, and perform their organizational functions at a more advanced level. Defined as an individual's voluntary behavior which contributes to the effective and productive functioning of organization as a whole while not being directly or clearly identified in the formal reward system of the organization, the **organizational citizenship behavior** has become more important for organizations (Organ, 1988; Seymen and Tokgöz, 2013). The term organizational citizenship behavior covers the voluntary behaviors displayed by an employee in addition to his/her formal duties within an organization, which contribute to the productive performance of that organization's functions (Celep and Polat, 2008). The term organizational citizenship is made up of five dimensions which are altruism, civic virtue, conscience, chivalry and kindness (Organ and Lingl, 1995). Altruism is the voluntary assistance given by employees to those who are inexperienced, or who have excess workload. Civic virtue means employees' active and voluntary participation in the organizational life. Conscience is the efforts made by the members of organization beyond expectations in some of their roles. Chivalry means such behaviors of organization members as being satisfied with less than ideal, enduring the hardships which can arise thereof, not complaining or bemoaning about this kind of situations and not focusing on such negativities. Kindness means the positive behaviors of the employees of an organization in their continuous interactions with each other due to their roles, the duties they perform as well as the decisions they take.

While there are employees who do not meet what is expected from them within organizations, there are also those who provide organizational benefit beyond expectations. The importance of organizational citizenship behaviors is crucial for ensuring organizational effectiveness and productivity as well as enhancing motivation and performance. The organizational citizenship behaviors displayed by teachers, who undertake the most important role in growing qualified labor force to contribute the development of countries as well as raising individuals who are mentally, physically and socially healthy. Teachers working in villages are inclined to display fewer formal role behaviors and higher organizational citizenship behaviors due to impossibilities. This is quite important regarding the personal development of students as well as the teachers who are in the beginning of their careers. Therefore, the awareness about the organizational citizenship behaviors displayed by teachers is highly important.

This study aims to identify the organizational citizenship behaviors displayed by teachers working at primary schools in villages, and define the dimension of organizational citizenship behavior, to which these behaviors are related.

## Method

While the research design used in this study is the case study design, which is one of the qualitative research designs, interview and document review have been used as data gathering technique. Inductive content analysis was used to analyse the data obtained from the study. Content analysis is a systematic and renewable technique that summarizes a text's words into smaller content categories with respect to codes based on specific rules (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2009). The study group of this research is made up of 30 teachers working in the city center and counties of Sivas, who have been selected by means of criterion sampling method. The criterion here is the requirement of having worked or working at a village school, and having displayed an organizational citizenship behavior. The teachers involved in the study group have been selected in line with the recommendations made by the managers of the Provincial Directorate for National Education, educational supervisors and other teachers. Before the interviews, the teachers to be interviewed have been informed about the research subject in detail, and it has been stated that all the data to be acquired will be used anonymously as a whole. Each teacher interviewed has been given a code. The data acquired have been put through content analysis, and the type and dimension of organizational citizenship behavior have been interpreted.

## Findings, Conclusions and Suggestions

In this study 85 organizational behaviors of 30 teachers have been analyzed. Organizational citizenship behaviors of teachers consisted the dimensions of 50 conscience, 14 gentlemanship, 10 altruism, 9 civic virtue and 2 kindness. As the organizational citizenship behaviors of the teachers who work in villages, it can be said that it is normal for the dimension of conscience coming in to prominence. As the schools in the villages have many problems and the teachers working there should be patient for them, they may put gentlemanship dimension on the second rank. It can be said that the conditions of the schools in villages increase the frequency of shoving organizational citizenship behaviors of the teachers. It can be offered that the teachers who will work in villages get seminars about the topic of sense job and organizational behaviors. Also the teachers who show organizational citizenship behavior can be awarded.

**Key words:** Organizational citizenship behaviors, Teachers working at primary schools in villages, Identify, Case study

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# **The Relationship Between Toxic Leadership Behavior of Managers and Organizational Silence Behaviour of Teachers**

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In order to achieve the goals of the school, the most important element needed is the school administrator who has the qualification and skill in provision of organizational resources and upbringing them. Above all, a good school administrator is expected to have the leadership qualities. Leadership is regarded as an art of affecting others in achieving the targets. Manager who has developed leadership skills, shows the extraordinary efforts for designing the future of the organization, while creating a vision for the future of the organization, efforts other employees to adopt this vision and even for the issues to develop with employees.

Many studies have been done on leadership in the literature; the majority of these studies have been trying to understand the "good" and "effective" leadership styles (Uymaz, 2014, 39) or to explain how successful leadership skills emerge. Very few of these studies have tried to demonstrate the damaging leadership and their impact on the organization. However, in recent years, dysfunctional leadership has started to be addressed in more detail, many negative features are evaluated together and it is called as the "toxic leadership". (Kırbaç, 2013, 3).

Toxic leadership reduces the efficiency of the employees, the continue rate at work, it also has a negative impact on the cost-benefit relationship of the organization, and causes poor performance by eliminating the group thought (Schmitd, 2008, 2). On the other hand toxic leaders poison the environment with their behavior such as making fun of their subordinates, getting angry excessively, emphasizing superiority, excessive control and heavy work load, and as a result they lead unhappiness of the employees of the organization.

In the modern era of the organizations are obliged to respond to raising of quality standards in an increasingly competitive environment and more importantly to constantly changing and improving society's expectations. In order to achieve these goals organizations should increase the rate of sharing knowledge with the employees; should act responsibly; should their make employees feel free to express their ideas and rely on their institutions more rigorously. Although organizational silence problems are seen in many organizations, there have been a few studies on this subject. According to Kılınc (2012), there is no emergence of an action as there is no speech and that is why this condition can not be clearly observed as the clear and distinct perception of shown behavior.

Organizational silence is expressed as a case the employees avoid commenting or expressing their opinions on the task area or other areas within the organization and that raises the possibility of a serious problem in organizational change and development. Although it is known that some individual and organizational reasons may cause the emergence of silence,

in the basis of this situation it is believed that the main reasons are the fears of exclusion by the other members and losing his or her job. Despite the focus on the empowerment of employees and necessity of establishing more effective communication channels in the literature, the employees do not feel in safe in against their managers creates a major problem for them.

Schools are seen as the most important institutions of society that meets the needs of skilled manpower. At the same time, educational institutions have also a mission of enabling change and development by producing information and perform such as an intergenerational cultural transmission. In the educational institutions which assume such an important responsibility, it is vital for them to prevent the various factors of weakening and reducing the effectiveness and the factors those blocking the change (Arlı, 2013). Therefore, leaders are obliged to adopt the human resources efficiently that is an indispensable element in the continuation of the school; to establish the organizational climate of confidence and encourage them to articulate their ideas and suggestions. In this context, to investigate the impact of toxic leadership on silence as a negative behavior in the organizations is seen as an important issue. In this study, the relationship between toxic leadership and organizational silence variables have been examined.

### **Purpose of the Study**

The purpose of this study is to determine the relationship between teachers' perceptions related to the toxic leadership behavior of managers in their schools and their silence attitudes. For this purpose;

1. What is the level of perception of high school teachers about toxic leadership behavior of managers?
2. What is the level of teachers' perceptions about organizational silence ?
3. What is the level of the relationship between perceptions of toxic leadership behavior and perceptions of silence of teachers?

### **Method**

The study was designed in the relational model. In order to determine this relationship, " Toxic Leadership" and "Organizational Silence" scales will be applied. The population of the research is the teachers working in high schools in the city of Elazığ. The scale research task will be applied to all teachers from ten schools (5 Anatolian High School, 4 Vocational High School and 1 Social Sciences High School) located in the city of Elazığ by using disproportionate sampling elements. Data obtained by scales will be analyzed in accordance with the purposes.

**Keywords:** Leader , toxic leaders , organizational silence

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# Teacher Characteristics, School Size and Relational Trust in Schools: A Meta-Analysis Study

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The issue of trust has become very important to schools. Trust is increasingly recognized as an essential element in high-functioning schools (Tschannen-Moran, 2014) because trust among the members of an organization positively affects their attitudes, behaviors, and performance (Van Maele, Van Houtte, Forsyth, 2014). Tschannen-Moran and Hoy (2000, 556) described trust as “a person’s willingness to be vulnerable to another based on the confidence that the latter is benevolent, reliable, competent, honest and open”. Bryk and Schneider (2002) argued that relational trust perspective views trust as anchored in the social exchanges within schools around role relationships. In schools, principals, teachers, students, and parents all have an idea about the obligations associated with their role and equally hold some expectations about the obligations of the other parties. For trust to develop, synchrony in each role relationship regarding the understanding held about the personal obligations and expectations of others is implied. Relational trust can facilitate the collaboration between teachers and different role groups around them, which can lead to the success of school improvement efforts (Tschannen-Moran 2001; Bryk and Schneider, 2002; Tschannen-Moran 2004; Louis, 2007) and mediate the relationship between school culture and teachers’ job satisfaction (Van Houtte 2006). The educational literature has demonstrated that teachers’ trust in other school members are affected by teacher characteristics and the school size. In the light of relational trust in schools literature, the following hypotheses were tested:

- H1. There is a positive correlation between teacher characteristics and teachers’ trust in the principal.
- H2. There is a positive correlation between teacher characteristics and teachers’ trust in the colleagues.
- H3. There is a positive correlation between teacher characteristics and teachers’ trust in the parents-students.
- H4. There is a positive correlation between school size and teachers’ trust in the principal.
- H5. There is a positive correlation between school size and teachers’ trust in the colleagues.
- H6. There is a positive correlation between school size and teachers’ trust in the parents-students.

## Method

Meta-analysis was used as the research method that combined the research findings of the studies conducted on the teachers’ relational trust topic in Turkey. An extensive literature search was conducted to identify both published and unpublished reports that examined the relationship between teachers’ relational trust, teacher characteristics and the school size. The search for studies to be used in the meta-analyses involved computer and manual methods. The computer search involved scanning the Council of Higher Education (YÖK), Google Academic, and Turkish National Academic Network and Information Center (ULAKBİM) databases using the key words *trust*, *organizational trust*, and *teacher trust*. The manual

search was conducted by published studies and dissertations. The initial search identified 51 studies.

The studies finally used in this study should conform to the following criteria: (1) the study has to be an empirical research; (2) To be included in analyses; a study had to report parametric statistics with relevant variables. (3) The study had to report on correlations or any other statistic that could be converted to a correlation coefficient, e.g., independent group t test or one-way ANOVA; (4) ANCOVA, partial correlations, regression coefficients, or path coefficients were excluded from the analysis; (4) Because of multiple methods of data collection, sometimes two studies were reached by the same author. For example, when one version of a study was collected as a dissertation and another version was found in a publication. If the two versions had reached, unpublished one was only used.

In total, research reports have identified providing usable data for 127 independent samples based on a total of 7838 teachers. Of these samples, 4 were from published articles and 14 were from unpublished dissertations.

Dependent variables included in analysis were teacher trust in the principal, colleagues and parents-students. This study mainly focuses on two potential moderators: teacher characteristics and school size. Demographic characteristics of participants included in this meta-analysis were experience, gender (males coded "1"; females coded "2"), education, subject, and experience in the school. School size variables were school size (teachers and students number).

In this study, as indicator of effect size is chosen the correlation coefficient. If necessary, an average correlation was used. To be included in the analysis, independent group t test or one-way ANOVA statistic were converted to a correlation coefficient. Random effects model was preferred according to heterogeneity test. Three publication bias tests were completed to evaluate the potential presence and degree of potential publication bias: (a) Egger's test of the intercept; (b) the moderate and severe a priori weight-function model technique; (c) the trim and fill test supplemented with the contour-enhanced funnel plot. All analyses were conducted using computer programs.

## **Findings**

As a result of meta-analysis, it was found that teacher characteristics correlated positively with teacher trust in the principal ( $r=0,09$ ). There is a positive correlation between teacher characteristics and teacher trust in the colleagues ( $r=0,08$ ). Teacher characteristics were positively related to teacher trust in the parents-students ( $r=0,12$ ). The school size were found to have a significant relationship with teacher trust in the principal ( $r=0,12$ ). The school size were found to be significantly related to the teacher trust in the colleagues ( $r=0,13$ ). There is a positive correlation between teacher characteristics and teacher trust in the parents-students ( $r=0,19$ ). Specifically, work experience in school among teacher characteristics correlated more strongly with teacher trust in the principal ( $r=0,16$ ) and parents-students ( $r=0,15$ ) in studies. However, teachers' total work experience correlated more strongly with teacher trust in the colleagues ( $r=0,13$ ). Among school size variables, the number of teachers working in schools with teacher trust in the principals ( $r=0,16$ ) and colleagues ( $r=0,14$ ) in studies. But, the number of students correlated more strongly with teacher trust in the parents-students ( $r=0,21$ ).

## Conclusions and Suggestions

This meta-analysis was summarized the existing data concerning teachers' relational trust in relation to teacher characteristics, school size variables. Therefore, the specific issues were examined dealt with the (a) justification of studying three relational types of trust in school: principal, colleagues, and parents-students; (b) teacher characteristics, school size predictors of teacher trust. The study's findings show that teacher characteristics and school size are more strongly related to teacher trust in the parents-students than to teacher trust in the principal and colleagues. It also revealed that teachers' relational trust correlations with the teacher characteristics and school size were generally low. The conclusions of this study were guided by the topics that occupied researchers of teacher trust thus far.

**Keywords:** Teacher characteristics, School size, relational trust

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# **Conflicts Between Executive and Judicial Powers: The Cases of School Principals' Appointment**

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The purpose of this study is to analyze the local administrative court's main grounded reasons about the suspension of executing of school principals' appointment.

## **Method**

This study has been carried out by using document analyzing method which is a kind of qualitative research. Qualitative researches aim to reveal hidden meanings in oral and written texts and to analyze relationships and structure of daily life of people and it aims to understand social world of people (Merriam, 2014). Document analyze encompasses analyzing of written materials which include some useful information about target phenomena (Yıldırım ve Şimşek, 2011).

Court files which are in the boundary of this research have been obtained from school principals who have been removed from administration. Principals who have been removed during 2014-2015 education year and they sued by lawyers of their official occupational unions. These court files have been got in the official web pages of these educational unions which have been uploaded by those removed principals. Court files encompass several lawsuits which have been sued in administrative court in twenty different cities of Turkey. Totally one hundred and sixty five court files have been analyzed.

Qualitative method and criteria sampling have been applied since only criteria was defined as administrative court's decisions objected to principals' appointment, thus 165 decisions of administrative courts that researchers obtained analyzed thematically. Data collection and analysis go hand in hand; each newly reached document have been analyzed depending on what was discovered during the previous stage and data was interpreted with the inductive content analysis (Snape & Spencer, 2003; Willis, 2007).

During analyzing court files five main areas regarded as a basic research point. First of them is removed principal's allegations, second is defenders' allegations, and third is courts accepted judicial points during evaluation process. The fourth point is analyzing discourse of jury member who is against of other jury members' judgment and the fifth point is analyzing of judgments and reasons of regional executive courts which are reverse to local executive courts' judgments.

## **Findings**

The findings of this research have been collected under six different topics. First topic is analyzing main discourses of removed principal's claims about to want suspension of execution. Second topic is analyzing main discourses of defenders' about to abatement of proceeding. Third topic is analyzing the main judicial reasons of court on the suspension of execution. The fourth topic is analyzing discourses of jury member whose vote is reverse to other jury members and in favor of defender. The fifth topic is analyzing the written and oral exam scores of removed principals which are totally under the seventy five point. The last topic is local administrative courts' kind of taking a decision in favor of removed principals.

#### **A. The Main Discourses of Removed Principals**

Under this topic there are some discourse analyzes about removed principals' demand to suspension of execution and there are the judicial reasons of this demand. Totally twenty one different themes have been found out about removed principals' demand on suspension of executing. Among the main reasons there are objection to subjective evaluation, illegality, ex awards and success, the short fellow working between evaluated principal and evaluators, contradiction to equity.

#### **B. The Main Discourses of Defender's**

Under this topic there are some discourse analyzes about to demand to suspension of proceeding. Among the main discourses there are inability to getting enough score, legality, objective evaluating, passing to new reformist administrating process and leaving the understanding of being glued to managing seat.

#### **Local Administrative Court's Main Reasons of Suspension of Execution**

Under this topic some reasons about to suspension of execution which is in favor of removed principals and against to defender have been analyzed. Among the main reasons there are the absence of solid evidence about the low scores, unrepairable effects on public order, intangibility, groundlessness, evaluation without objectivity, and contradiction to impartial evaluating, incoherence about evaluating.

#### **C. Evaluating Scores**

In accordance with the respective regulations principals who want to continue their managing duty should get minimum seventy five point on hundred. According to files which are in the boundary of this research eight principals (% 4, 84) have got scores under than 40, 99 point. Ten principals (% 6, 06) have got points between 41, 00 and 50, 99. Fifty one principals (%30, 90) have got points between 51, 00 and 60, 99. Sixty two principals (% 37, 57) have got points between 61, 00 and 74, 99. In thirty four files (% 20, 60) there are no any certain exam scores.

#### **D. Local Administrative Court's Decision Taking Method**

Under this topic types of taking suspension of executing have been analyzed. According to court files analyzes the major of decisions (one hundred and fifty four-% 93, 33) have been taken by unanimity. The less of decisions (eleven of one hundred and sixty five-% 6, 67) have been taken by a large of majority.

## Conclusion

With the representing the executing power the evaluating board of education ministry and with the representing the judiciary power the local administrative courts have two different decisions and practices. Both of powers have valid grounds and arguments. It can be clearly seen in different studies that schools became to hardly managing institutions due to both the legal characteristics' of these kind of judicial decisions and administrative boards' appointment decisions (Aslanargun, 2012).

## Suggestions

In order to create positive school climate judicial decisions should be compatible with executive board's appointment decisions.

**Keywords:** Principal, Judgement, Appointment, Executive

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# The Relationship Between Motivation Methods of School Principals and Work and Private Life Balance of Teachers

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## Objective

The objective of this study is to analyse the relationship between school principals' motivating behaviours and the balance of teachers' work and private life according to teachers.

In line with this objective the following sub-problems will be explored.

- According to teachers which motivation methods are used by the school principals and at what levels?
- How is the balance between the work and private life of teachers?
- How a correlation exists between motivation methods of school principals and teachers' work and private life?

## Method

**Research design:** This study aims to determine the relationship between school principals' motivation methods and balance between work and private life of teachers which includes correlational screening model and carries a descriptive feature. Screening model is a type of study which aims to describe a past and / or present situation as it is in its original features (Karasar, 2008). Correlational screening models are the research models which aim to determine the presence and/or degree of a change between two or more variables.

**Participants:** The universe of this research is the teachers working in public primary and secondary schools located in Van city centre. Rate-layer method is used in the sample selection. The sample of this study, accordingly, located in the district location is composed of 500 teachers working in public schools. In Van (Tuşba, Ipekyolu and Edremit) the number of teachers in the district, intended to reach the teacher ratio represents the universe.

**Data collection tools:** Taking necessary permissions from the researchers on the subject in the collection of survey data, "Measuring the effectiveness of school administrators to provide motivation inventory" developed by ÇİÇEK (2002); and "Work-life balance scale" developed by CEYLAN (2011) will be used.

**Data analysing techniques:** To analyse the data, descriptive statistics by SPSS 21 program (frequency, percentage, mean, standard deviation) were conducted. Scales, as well as the

frequency of use for each dimension formed Likert-type rating scale is used. Correlational analysis is applied to determine the direction of relation between the two scales.

### **Findings and conclusions**

- School principal motivation ensure the effectiveness of the measure inventory (motivation methods scale) descriptive statistics relationship findings of the sub-dimensions: According to the results principals psycho-social and material dimensions are not sufficient, (2.16-1.90) teachers cannot be motivated with the **rescore** (they are inadequate) were determined.
- The findings concerning the descriptive statistics of those who belong to the lower size of the teachers' work-life balance: teachers, special effects on work life ( $\bar{x}=2,42$ ) and work and private life development ( $\bar{x}=2,58$ ) effect of "they do not agreed"; impact on the business of private life ( $\bar{x}=3,31$ ) and combination of private life and business ( $\bar{x}=2,86$ ) effect "not decided yet" is observed.
- Teacher work-life balance, the scale of the dimensions of teacher motivation methods of principals are based on perception (motivation methods scale) correlation of lower dimensions (relational values: manager of the psycho-social and organizational-managerial dimension is used, the teachers in the employment impact of the private life of a negative relationship. Among other sub-dimensions there is a weak positive relationship is observed.

### **Suggestions**

- School principals, in order to support teachers in psycho-social and material dimensions more effective-efficient in the job (salary, send flowers, takes small gifts, a platelet, to subscribe to the academic journal, to prepare good bye and welcome party) should be pursued adequately.
- To cancel out both in work and private life does not mean to succeed in everything. That's why employees should develop the ability to manage time. The organization also should provide family friendly practices which help to ensure that the work-life balances.
- A reward system can be used to increase motivation of teachers by school principals.
- Studies should be done about the relationship between motivation techniques of managers and school success.
- Events and meetings can be arranged to improve communication between employees at school.
- Teachers should use more the tools which has a high level of motivation.
- The creation of a system which provide teachers to express their feelings openly, feedbacks, advice, supports will make this job more efficiently.

**Keywords:** Motivation, work-private life balance, motivating behaviour

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# **Administration Model for Education Executives in Private Schools and Teachers' Perception in This Sense**

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## **A Condition Posing a Delicate Problem**

The speedy and yet multi-faceted changes and transformation we're experiencing in the world have enforced us to rethink our administration concepts and conventional bureaucratic structures and come up, in a new way, with a new radical structuring in this sense. The change factors that radically stimulate and affect the administration approach and the related structures in the world that find an explanation only when the on-going globalisation and transitional process towards an information society are taken into account, strain the world where the borders are becoming vague more and more, where the outside and inside combine in each other in an environment where interaction is experienced in its densest form. It's not anymore the old world where the differences between the outside and inside were relatively easy to define.

The administrative style and its goal can sometimes not be harmonized at a desired level on the grounds of the structural contradictions arising from the administrative style itself and the effects of the inconveniencies that should be addressed. The distribution of the authority to decide is the fundamental effect that determines the framework of a administrative style. In such circumstances, a hot debate breaks out on the matter if the decision-making authority would be exercised in the centre or in the periphery.

In these discussions, the fact comes to the forefront that it has become impossible to administer hundreds of thousands of educational institutions only from one centre; in return, such elements as quality, efficiency, speed, effectiveness, participation and collaboration have become the factors that are underlined and valued more and more. Amid appeals that education should be supported in a rate of 100 %, a transition from a centralized administration to one that is decentralized is deemed as necessary in terms of more effectiveness in these services. When we view the matter from this aspect rethinking administrative styles in terms of administration in the field of education, *it becomes significant to get to know the conceptions and arguments of the teachers as the staff administered. In this concept, it is of great importance to study the reflection of public practices in the private sector and find out how the public administration system is conceived in the private sector.*

In the light of the increasing presence of the private sector in the area of education as in other sectors, this study has been executed to investigate the perspectives of the teachers employed in private schools with regard to the administration models applied in their schools.

### **The Method Applied**

This study has been carried out in *general survey model*. The teachers performing their duties in private schools within the body of the Ministry of Education were questioned within the framework of this study in an aim to clarify **“the perceptions of teachers on the implemented management model by the school managers”**. As the profiling that has emerged as a result of the study is based on teachers' views and arguments, the study has a descriptive and confirming character. The questionnaire of "Administration Models" developed by Çelik (2008:116-117) in fivefold linert type was applied in this study.

### **The Population of the Study and Sampling Method**

The teachers engaged in the private schools under the Ministry of Education in the districts of Bayrampaşa, Zeytinburnu, Ortaköy and Bahçelievler in the province of İstanbul constituted the survey population in the research. A **sampling** group was formed in the method of "Simple Random Sampling" from among the teachers comprising the survey population.

### **The Collection of Data, Analysis and Interpretation**

First of all literature research was conducted for the purpose to determine **“the perceptions of teachers on the implemented management model by the school managers”** of the teachers working in private schools in İstanbul Province under Ministry of National Education at the districts of Bayrampaşa, Zeytinburnu, Ortaköy and Bahçelievler during the education year of 2014-2015, relevant legislations were reviewed and opinions were determined by means of a survey. *“Management Models”* survey which is developed by Çelik (2008: 116-117) in five point likert scale, was used. The opinions of the teachers were handled and assessed by taking gender variable into consideration. The data collected within the study were entered into Excel program and later analyzed by means of SPSS statistics package program. The evaluation of the study was executed deeming that the options and the intervals in the options given in the questionnaire were equal. The options of the items in the questionnaire and the related weights given to these options were specified as follows: “1- I strongly disagree: 1,00–1,80”, “2-I don't agree: 1,810–2,60”, “3-I partialy agree: 2,61–3,40”, “4-I mostly agree: 3,40–4,20” and “5-I strongly agree: 4,20–5,00”.

### **Findings and Outcomes**

The findings and results of this study are explained as follows:

The opinions of the teachers working at private schools about “the perceptions of teachers on the implemented management model by the school managers” **are defined** in three different dimensions relevant to the considerations of *“Autocratic Management Model”*, *“Participative Management Model”* and *“Free Hand Management Model”*. When the survey is assessed as a whole, the teachers responded in the survey at “Partially Agree” level with 3,08 arithmetic average. When we considered the issue with respect to gender variable female teachers responded at “Partially Agree” level with 3,08 arithmetic average, “the perceptions of teachers on the implemented management model by the school managers” by arithmetic

average of 3,21”; male teachers responded by arithmetic average of 2,93” and in both groups they participated in “Partially Agree” level. When we consider the issue relevant to the items, teachers responded that “definitely they do not agree or they partially agree with the prepositions related with “Autocratic Management Model”, they stated they mostly agree with the prepositions related with “Participative Management Model”. In line with these results, it is suggested that the managers of the private schools should provide education that will adopt philosophy of governance and participative approach, hold workshops, meetings etc. with participation of sectors related with school management models, and to make private school managers take master degree education in their field.

**Keywords:** Education, School administration, Education Administration Models, Private School, Executive.

# Selection of Managers for Educational Institutions Affiliated to the Education Ministry of Iran

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The study aims to evaluate the selection of the managers for the organizations of education affiliated to Iran ministry of education, using the prepared questionnaire the author has made some interviews from the manager of the organization of education and the academicians of the field. The non-random questionnaire has been used for the managers of the organizations of education located in 17 cities of West Azerbaijan and the academic board of the field at a state university. The total number of the participants in the interviews is 106. Due to the model used, the type of the study is qualitative. The method of data collection in this study will be interview for the analyses of the results of the study, the method of qualitative content analysis has been used. The results and suggestions of the study could be out lined as the following:

For the managing of organization of education, holding BA and MA in educational management and having teaching and experience, passing written interview examinations and having the knowledge and skill of management is necessary. Suggestions For the managing of organization of education, having teaching experience, those who gain high scores in the exam should be preferred, the required characteristics of a manager( leadership, human relations, etc.) Should be given importance, the exam should be made by a commission including the ministry of education, organization of evaluation and academic board of the university. Finally the knowledge and skill full persons are recommended for the management.

**Key words:** educational management, selection of educational manager, education system

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# **Study of Educational Management Status in Iran- A Qualitative Study**

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This study has been performed to clarify the academic status of educational management as an academic discipline from the perspective of Islamic Azad University Faculty members in Western Azerbaijan. Faculty members who were employed in educational groups – oriented educational administration were selected as research sample. The combination of these professors was composed of one master professor, six assistant professors, and nine teachers. Because of the low number of faculty members, all of them were selected as sample and were participated in interview. According to theoretical foundations of research, the collection of data was conducted through qualitative research method and a form of semi-structured for interview. The data were analyzed by content analysis. The results show the complexity of this area and different problems in various dimensions. Most problems show off associated with conducted researches in this field and faculty members employed in it, the scientific bases of this discipline, professionalism and political- social events.

The findings of research show impressions of teachers employed Islamic Azad University in West Azerbaijan province in relation to the status of educational management in the academic sense. The second significant issue is related to the activity and scientific studies in clarifying studies of educational management in the world. According to the findings, from the view of approximately half of the professors, the existing resources in this area have scientific bases. Another result of research is the professors' emphasis to govern positivist paradigm on educational administration and the approach of quantitative research method. This finding has been emphasized by many writers in this field.

Another fundamental issue that has been discussed in the research is the impact of events has been influenced the field of educational administration from past to the present. The decision of government for sending students to prestigious universities of world in the field of educational administration is the establishment of educational administration for the first time in Iran in 1968 in college of Tehran.

According to general goal of research, another case is daily problems of educational administration in relation to stabilize scientific status of this area. The less contribution of this field's teachers is associated with Ministry of Education and also failure to use research findings of this area in applications and decisions.

Another major issue is associated with personal problems of teachers. Teachers stated some of the cases including foreign language problem, insufficient cooperation and scientific communication between teachers, the low number of teachers in this field and high workload for teachers, the lack of attention to the academic qualifications of teachers and the lack of teachers with high academic degrees. Because of scientific, artistic, and functional dimensions of educational administration, it is more difficult to define it as a Professional area. In general, according to research findings and in light of the existing background, in the view of the Faculty of Islamic Azad Universities in Western Azerbaijan Province, the field of educational administration in Iran is a complex area and has specific issues.

Finally, based on findings of this study we can provide some cases as a recommendation to practitioners, particularly decision makers of educational system such as requirement to strengthen cultural cooperation and the correlation between the academic faculties in scientific associations, collection of books and common scientific articles, reduce the gap between theory and practice through the efforts of the ideas presented in localizing and concentration on problems of education system of country, allocate adequate funds to enhance educational efforts related to educational administration and avoid duplication and copying western works, innovation and creativity in this area given to the realities of the country and performing scientific studies related to them, increase duration of reading opportunities associated with educational administration of faculty members in the field of educational administration, revise the way of student selection for this field and so on.

**Key words:** educational management, scientific status, the scientific bases of educational management

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# The Effect of Social Intelligence Level of School Principals' on Leadership Behaviors

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The aim of this study is to reveal the effect of school admins' social intelligence levels on leadership skills.

Education organizations are institutions which aim to grow up high qualified people with quality education. Teachers undoubtedly plays the main role to make this goal real. Being successful in education organizations is possible by being well motivated to the jobs for teachers. Motivating teachers in their jobs, increasing their efficiency, and providing to be satisfied by this way are school admins' job.

Human relations on management are intended to balance meeting workers' requirements and performing organization's goals. Researches conducted proved that behaviors of school admins are very effective on teachers' efficiency. For schoolmasters , having the ability for dealing with people, understanding others' feelings, thoughts ,and intentions , judging about feeling, humor, and motivation of people properly is related with being high of social intelligence levels and associational leadership skills. A schoolmaster who is efficient about human relations will know how to balance the goals of school and workers at school(Bozkurt, 1995). Most research shows that masters spend their % 50 of their time in organization by interacting with workers (Basaran, 1992:113).

Marlowe (1986) defined social intelligence like that: “ Social intelligence or social competence is the ability to understand feelings, thoughts, and behaviors of people, including himself or herself, and to behave in that way.” While defining social intelligence, especially how people understand their own and other people's behaviors are stressed.

School admins who works as school managers and sub managers in elementary and secondary schools in Şahinbey district in Gaziantep city constitute the system of the research. School managers who take place in the sample of research are determined from among managers who works in schools where research conducted by simple and random sampling method. Sample of research consists of total 171 managers who represent %23 of the system. Data of the research is put together with “Inventory of Leadership Applications” developed by Silvera, Martinussen ve Dahl (2001) and Tromso Sosyal Zekâ Ölçeği (TSZÖ)' ve Kouzes ve Posner (2001) and transcribed to Turkish by Doğan ve Çetin (2009).

Tromso Social Intelligence Scale-TSIS is a means of self-report with twenty-one items, which is prepared to reveal social intelligence scale by Silvera and his friends(2001). TSIS evaluates social intelligence in three fields. **(i)Social Information Process** : Skills of understanding

verbal and nonverbal messages about human relations, empathizing, and reading hidden messages beyond explicit messages are measured on that sub-dimension of the scale. **(ii) Social Skill** : Basic communication skills like active listening, enterprising, starting a relation, keeping it on, and finishing are measured on that sub-dimension of the scale. Sample item : “ I am good at meeting people for the first time and being in new environments.” **(iii) Social Awareness** : Effective behaving skill is measured that is according with environment, place, and time on awareness sub dimension of the scale. Sample item : “I hurt other people many times unwittingly.” From these sub dimensions ,each of social information process , social skills ,and social awareness consists of seven items. Answer key in type of five point likert scale has been prepared for items in the scale.

Existence of leadership skills and levels of being exhibited are evaluated based on behaviors in inventory of leadership applications. Five basic sub leadership behaviors in for “ guidance”, “creating a common vision” , “questioning the process”, “encouraging personnel about development” ,and “celebrating the success of audience and encouraging” are examined. Conceptual frame about leadership of each dimension is explained like that(Kouzes ve Posner, 2001:4). An answer key with a type of five points Likert scale has been prepared for items in the scale.

A causative pattern has been used on the purpose of examining to what extent social intelligence levels of school managers predict leadership behaviors in the pattern of this study. Causative pattern is a research pattern which examines cause-effect relations existing or showing up among some factors.

Statistical Package for the Social Sciences (SPSS21) programme has been used for analysis of data in the extent of research.

Primarily descriptive statics which are used in collecting numerical data about a factor , defining ,and presenting are benefited, and profiles of participants who take place in paradigm are found out. Distribution of frequency and percentage are presented in that extent.

In all of the statistically calculations, level of significance is accepted as .05. When differences between the groups( categories) of independent variables level of significance are found smaller than .05 ( $p < .05$ ) is accepted as “significant” and results are evaluated according to this.

For investigating general social intelligence levels and general scores of leadership behaviors of social intelligence sub-dimensions, hierarchical multi-linear regression analyses are done including control variables. The variables which are defined as control variables and scores about general conceptions are included to analysis by using enter mode. For the purpose of establishing how well leadership behaviors predict dependent variable and its dimensions, stepwise method which is among multi-linear regression methods has been used in last step of hierarchical regression of social intelligence dimensions.

It is thought that this study will provide benefit for school admins, teachers and most importantly our schools. Moreover, it is expected the results found at the end of this study should be quality to guide education admins and policy developers. This study will have important contributions because it will be searched as first in the national and international level, and because of having different aspects for both organizational leadership and behavior literature and our country’s education system.

The relations between social intelligence dimensions and effects on dimensions of leadership behaviors, and levels of its effects are presented. At the end of the study, suggestions for improving social intelligence levels of school admins have been presented.

# The Relationship Between School Characteristics and Teacher Related Learning Hindrances at Turkish Schools

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**Problem:** The most basic goal of the educational systems is to prepare kids for their adulthood, their later social and professional life, through bringing necessary skills, knowledge and attitudes. In formal education, these targets are planned to accomplish by already-planned learning experiences at schools, one of the places where two sides, students and teachers, come together for teaching and learning. Students' learning occurs at these places through the guidance of their teachers. Teachers, as the ones who plan and practice the whole life within the classroom and the school, have the most crucial responsibility and duty of teaching. Any problem at any side, students or teachers as the indispensable components of the teaching and learning process, therefore, puts the whole process in danger. For years, all the stake-holders in education have complained about the quality of school education and lower standards of achievements. Each holder has blamed the other side for the problems of teaching process and results themselves. Teachers have blamed students and parents, and the parents, students and principals often blamed the teachers for the low achievement (Fer, 2011, s.xiii). On the other side, schools themselves, as the main hosts for this teaching and learning process, are also able to shape all the behaviours of and the interactions between teachers and students through their institutional characteristics. As well as the building characteristics of the schools, some other institutional characteristics, such as over-crowdedness, funding, admission policies, school location, may cause to emerge different kinds of problems, at both sides, teacher and student. From this perspective, it is aimed in this study from the principals' perspective to describe the relationship between the teachers' behaviours in teaching and the school characteristics, and to find out the variations in the problems compared to institutional characteristics of schools.

**Method:** This study is a secondary analysis based on a causal-comparative research design (Fraenkel, Wallen and Hyun, 2012). Data are obtained from PISA 2003 and 2012 surveys. Responses recorded by the likert type scales were drawn from the sample of 159 school principals in 2003 PISA survey and 170 principals in 2012. Each survey responses were analysed descriptively by the analysis of variance (one-way ANOVA) and bivariate correlation. Within the analysis, the dependent variables are the teacher-related learning hindrances, and the grouping factors are the school institutional factors, e.g. school location, school size, student-teacher ratio, school funding type and admission policy. The results then were compared to check any change over time in the teacher-related learning problems.

**Findings:** Teacher-related learning problems at schools correlate weakly to school size. Problems, however, do not at all correlate to the school characteristics of school location and funding both in 2003 and 2012. On the other hand, while the problems are correlated in 2003 to the teacher-student ratio in a weak manner, they later correlate in 2012 to the school

selectivity weakly and negatively. Additionally, among the grouping factors in 2003, only school size and teacher-student ratio, account for the variation in the perceptions regarding teacher-related learning problems at schools. In contrast, none of the school factors in 2012 is responsible for the variation in the perceptions of learning problems.

**Conclusion:** To the findings, teacher related learning hindrances in Turkey correlate to different school institutional factors at different time points. While, in 2003, problems with teacher-origin correlate only to the school size and teacher-student ratio, they later correlate to both school size and school selectivity. From 2003 to 2012, the source of the variation in teacher-originated learning hindrances has a little bit changed to the schools' admission policies from the over-crowdedness at classes and schools. In 2003, the more crowded classes and schools, the more teacher-related problems in the classes and the schools, but later in 2012, academic selectivity appears additionally as a new but weak source of teacher-related problems at schools. In this sense, high schools' student admission policy based on students' academic records appears to be a recent source of problems at teacher side at schools. For the problems to rise on the teachers side, students' admission to the high schools based on their academic success on the exams just before the transition may cause students gather into different groups with different skills, knowledge and attitude. In this case, classes with students of lower skills and attitudes may create more problems that teachers have to face.

**Keywords:** Learning hindrances, school characteristics, learning environments, PISA

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## Identification of Academic and Managerial Talents' & Viability of Talent Management in University

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Universities believed as a most powerful organizations which have highly skilled and intellectual work force. On the other hand universities are in a highly competitive environment under the global effects. Multiversity in higher education, Bologna process, aging and retirement of workforce, talent shortage, different working habits and demands of new generation employees, brain drain, losing experienced staffs are some problems for the organizations. Responsibilities and roles of the University leaders' and administrators' are now more complex in 21 century (Heuer, 2003). They should manage their institutions keeping the balance between adopting a new competitive global environment and meet the academic and administrative staff's needs and demands.

Talent management is a new human resources approach and accepted as the third stage of human resources management (Fang Li & Devos, 2008, 36). **Talent management** is "systematic attraction, identification, development, engagement, retention and deployment of those individuals who are of particular value to an organisation, either in view of their 'high potential' for the future or because they are fulfilling business/operation-critical roles (CIPD, 2007, 3). According to Gorrow & Hirsh (2008, 389) "the idea of talent management is attractive for managers and experts because it is about developing their organization's workforce for the future". Talent management enable and ensure organisations sustainable success and organizations could gain competitive advantage (Michaels, Hanfield-Jones & Axelrod, 2001, 1). Talent consists of those individuals who can make a difference to organizational performance either through their immediate contribution or, in the longer-term, by demonstrating the highest levels of potential.

Institutions of higher education face challenges in managing their academic and administrative talent. Because universities should cope with aging and retirement, danger of losing experienced highly skilled academic staff. Academics demand job satisfaction, engagement, reward & appreciation, work-life balance, meaningful and purposeful working conditions. And Y Generation research assistants who are at the beginning of their academic careers need to be developed. Higher education institutions should be sensitive to these demands. Management systems should provide positive working environment, meaningful work, satisfactory compensations and rewards, professional development opportunities in order to enable organizational productivity and effectiveness.

Talent management systems provides these conditions. Talent management programmes include leadership development programmes and provide a high calibre academics for the future of the organizations'. Talent management is an integrated activities which consists of attracting, deploying, developing, retaining talented groups in an organization. "Talent mindset" in the managerial level is a main requirement in order to be able to implement any TM programme. Universities has a various advantages in order to implement a talent management but there is limited interest about a talent management approach and implementations in higher education institutions (Bisbee & Miller, 2003; Heuer, 2003).

Purpose of this study is to identify academic and managerial talents' and examine the viability of talent management in universities according to the opinions and perceptions of University administrators.

## **Method**

Qualitative research method employed in this study. The study group consist of fourteen heads of department and deputy deans from three public universities. Data collected through interviews by using semi structured interview form which was developed by the researcher based on the conceptual analysis and comprehensive literature review. Content analysis was used to analyze the data.

## **Findings**

According to findings academic talents are identified under the main themes as high intellectual capacity, expertness & merit in the subject areas, harmonious and positive personality, strong cultural and academic background, ability to produce, execute and disseminate scientific studies. Managerial talents are identified as strong communication & problem solving skills, democratic and fair personality, visioner and value creator, strong ability to create positive and peaceful working environment. It was also found that implementation of talent management depends on to make some regulations. These are paradigm shift in demand to talent, having a talent mindset at managerial level, creating a talent criterias for the future of the universities.

## **Conclusions**

Academic and managerial talents have been especially identified according to personality traits, intellectual capacity, critical thinking skills, and qualitative quality of scientific works and merit in the subject areas. Viability of talent management in universities depends on paradigm shift about talent and talent management. Rules and human resources management mechanisms of higher education institutions can be regulated according to a talent perspectives with a contemporary criterias.

## **Suggestions**

Main themes of academic and managerial talents in universities was explored in this study. This results can provide a data for the further studies which aims to determine a detailed criterias for talent managements in universities. University managers and administrators should be informed and trained about talent management. Workshops and meetings could be arranged for the policy makers to determine a strategy and talent mindset.

**Keywords:** Talent Management, University, Higher Education, Academic Staff

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# **The Relationship Between the Schools' DNA Profile and Teachers' Psychological Capital**

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Once we see organizations as living organisms, each organization will provide unique characteristics and these characteristics distinguish themselves from other organizations. The concept of 'organization DNA' that has recently emerged is an example of this. Govindarajan and Trimble (2005) defines organization DNA as a cycle of structure, culture, employee and system; Döş (2013) sees this as the identity and fingerprint of an organization and believes each member of organization has the DNA of the organization to which s/he belongs (Döş & Çetin, 2014). Adams and Adams (1997) associated organizational culture with the DNA of living beings and pointed out that the DNA of the organization has also its own culture. They stated that the corporate culture makes the rules forming our expectations, directing our behaviours and affecting our results (Özden, 2002, C.f. Işık & Gürsel, 2009). The main reason lying under identifying the organization DNA is to prolong the survival of organizations (having a lifetime just like the employees) and determine the interventions (improvements). Organizational DNA is therefore a key indicator for finding a direction and following a vision (Onay & Ergüden, 2012). Thus, it is understood through the literature that the organizational DNA seems to affect employee's psychological capital. By and large, psychological capital is mostly related to individuals' being the best and what s/he is going to become rather than who the individual is. Psychological resources of employees are stated as hope, optimism, self-efficacy and psychological resilience (Erkmen & Esen, 2013). In the studies after 2000s, the researchers have focused on individuals' positive psychological state developing on the basis of hope, optimism, self-efficacy and resilience. Psychological capital establishes a connection between employee behaviours and the outcomes of organization (Keser & Kocabaş, 2014). Connected with these studies, the purpose of this study is to determine whether a relationship exists between the DNA profile of schools (as an organization) and teachers' psychological capital.

For this purpose, we examined the following research questions

- 1) What are teachers' perceptions about their schools' DNA profile? Is there a significant difference among the teachers' perceptions with respect to the type of the school?
- 2) What is the level of teachers' psychological capital? Does the level of teachers' psychological capital differ according to the type of school?

3) Is there a significant relationship between teachers' perceptions for the DNA profile of their schools and their psychological capital level?

## **Method**

The relational screening model was adopted in this research. The study sample consists of 308 teachers (elementary, secondary, high school) working in Uşak. The study was carried out by using convenience sampling method. The research data were collected through "Organizational DNA Scale" developed by Döş and Çetin (2013) and "Psychological Capital Scale" developed by Tösten and Özgan (2014). Organizational DNA Scale consists of six dimensions for a total of 28 questions. These dimensions are as the following; flexible organizations, military organizations, full-time organizations, organizations of inspirations and beginnings, management-oriented organizations and passive-aggressive organizations. Psychological Capital Scale also consists of six dimensions for a total of 26 questions. These dimensions are; self-efficacy, optimism, confidence, extroversion, psychological resilience and hope. According to the results of confirmatory factor analysis applied to both scales, the eligibility of the scales was confirmed. The reliability analysis has shown that the reliability of both scales was at the desired level. One-way analysis of variance and Pearson product-moment correlation coefficient were used in data analysis.

## **Results and Suggestions**

The teachers' perceptions (working in elementary, secondary and high schools) about their schools' DNA profile differ with respect to the type of the school. The teachers working in elementary schools (compared to those working in secondary and high schools) stated that their schools' DNA profile as flexible organizations, military organizations and full-time organizations. Those working in secondary and high schools stated their schools' DNA profile as organization of inspirations and beginnings, management-oriented organizations and passive-aggressive organizations.

As suggested, the level of teachers' psychological capital differs according to the type of school. As the results of the analysis (to determine the level of psychological capital with respect to the type of school) show, the elementary school teachers' level of self-efficacy, optimism, confidence, extroversion, psychological resilience and hope are higher than those working in secondary and high school. According to the correlation analysis (to determine), there is a low-grade positive relationship between institution structure's being flexible, military and full-time organization and teachers' psychological capital dimensions. There is also a low-grade negative relationship between institution structure's being organization of inspiration and beginnings, management-oriented organization and passive-aggressive organization and teachers' psychological capital.

Teachers' perceptions for the DNA profile of their schools differ with respect to the type of school. The underlying reasons should be investigated through qualitative and quantitative studies. Further studies should consider the factors affecting teachers' psychological capital levels with respect to the type of school.

**Keywords:** Organization DNA, psychological capital, positive psychology.

## **Management Training Profile in Developed and Developing Countries**

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Manager has a very important function in realising organization's objectives. So, school director has a key role in forming an effective school. Effectiveness and success of a school can be associated to manager's competence and quality of this school widely. One of the most important factors of the school success is school director. Decisiveness on school success has raised importance and necessity of training of education directors and it has started to dwell on this subject. Although the question "what can be the truest approach relating to assignment and training of school directors" is a subject all the nations overemphasise, an educational administration theory everybody agrees on hasn't been developed in order to ground on educational administration preparation programs. Therefore, developing suggestions to contribute better operation of the system is considered significant by comparing the structure of manager assignment and training in our country with manager selection and assignment system in developed and developing countries whether it has a structure in order to enable to realise the objectives of school management.

### **Objectice**

The aim of this survey is to determine the current situation concerning manager selection and assignment in developed and developing countries and to make suggestions to contribute this process in Turkey. For that purpose, manager selection and assignment processes have been investigated and compared in developed countries such as USA, England, France, Finland, in developing countries such as Poland, Lithuania, Hungary and in Turkey as part of developing countries .

### **Method**

In line with general purpose of the survey, manager selection and assignment processes of developed countries such as USA, England, France, Finland, developing countries such as Poland, Lithuania, Hungary and Turkey as part of developing countries have been investigated by making literature review and similarities and differences of countries' manager selection and assignment processes have been tried to determine and suggestions have been made.

## **Finding**

According to findings, in developed countries within survey, management has been seen as a profession and it is a well accepted consideration that school management training should be postgraduate level .Duration of the training program in developed countries can be differentiate in each country but, the common point in practices is that before beginning the duty, school manager candidates are tried to gain necessary knowledge and skills .In England as distinct from the other developed countries which investigated, duration of training of school manager candidates has been realised before election process.It is a common fact to have teaching background of school manager candidates.Only in Finland, teaching requirement isn't compulsory.Only in France among developed countries which investigated, procedure in manager selection for primary and secondary education institutions is seen to become different.In the other countries, manager selection and training processes aren't different according to school level. In developing countries, there aren't any training programs before assignment to school management. For assignment to school management, it is seen as a basic provision to teach at school and have a university degree. School managers appointed from among successful teachers are trained with inservice training and It is the most common method applied in training of managers. When considering in terms of Turkey, it is seen that school managers are appointed and trained with paralel practices like the other developing countries.One of the functions of Educational Administration, Supervision, Planning and Economy Departments in Turkish universities is to train manager for the education system.While hundreds of graduate are produced with post graduate and doctorate programs in these departments, it can't be understood ministry admits that studying at the level of post graduate is only "reason for preference" .

## **Outcomes and proposals**

Based on findings obtained from literature review, we can bring forward these proposals; Policies should be developed and put into practice to provide training before and after duty of school managers required for the country.For school management, theoretic and practical training programs should be opened in cooperation with universities and ministry of national education. For school management,at least masters with thesis or without thesis in administrative domain should be obligation and afterwards, training programs of leader manager should be opened and successful graduates should be appointed to position of school management.

**Keywords:** School manager growing, selection and appointment structures of countries.

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# **Teachers' Perception Abilities Related to Organizational Hygiene and Motivation Theory in The Province of Şırnak**

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The Studies of education institutions play an active role in the development of society so unavoidable that they need to better educator. In order to make better studies of educators can be thought to be depended on several factors. Not only the motivation of employees in each occupational group in the field of education is an important factor. Students usually wish more desire to study in the school, as the job of the workers in the factory and so eager to participate in the meeting as prepared a mid-level manager told, and the necessary information is closely related to a person's motivation (Fındıkçı, 1999: 203). Student satisfaction as the individual personal needs will start by made on the organizational aspects of the each organization's members, to continue their work and tasks that enable them to fulfill the request all the forces or mechanisms are mentioned (Figs, 1984: 2) .In this study, the underlying research Herzberg's Two Factor Theory, people's needs and people satisfy those who did not It is a theory that weight factors. These hygiene factors; fees, audit quality (style), company rules and policy, working conditions, job security, relations between individuals (junior, senior and peers) respectively. The motivating factor for success, recognition, work itself, development opportunities, advancement opportunities, responsibilities, as feedback were investigated. Herzberg et al, approximately 200 engineers in Pittsburgh and in consultation with a group consisting of accountants from their past work and especially themselves from when they work they feel satisfied and motivated and also recall situations in which they feel the opposite situation. This is what good and bad are as feeling that they wanted to identify them then they feel. Answers received were registered and content analysis of job satisfaction of employees was used. The results and their answers in relation to the dissatisfaction has identified the existence of two different sizes (Moorhead and Griffin, 1989: 116) According to the results of "protective (hygiene) factors" and "motivating factors "namely that there are two different groups of factors and people in the workplace has been affected in different methods (Tosi, Rizzo and Carroll, 1990: 275).

This research aims to determine the perceptions of teachers regarding the organizational level of hygiene and motivation theory. The descriptive survey method was used in the quantitative aspects of this research. The population of the study constitutes 1130 teachers working in the city center of Şırnak. The representative sample was investigated as 295 teachers assigned randomly. Büyükgöz searched base data collection (2008), including two sub- 26-item scale developed by using hygiene and motivation. The obtained data were used in SPSS 21.00 software. Essential validity and the arithmetic average of the data made reliability study for the scale, standard deviation, percentile values were taken. For the binary variables, t-tests, variable indicating parametric distribution for more than two variables, One Way ANOVA were used. For the variables with non-parametric distribution, the Kruskal-Wallis test was used. The data obtained were analyzed Scheffe Post Hoc test to find out the reason of the difference defined in tables.

In general the results obtained in this study according to the hygiene factor of the detection levels searched on education of those motivational factors were found to be at a much higher level. Besides, gender, age, seniority and according to the types of variables such as type of school teachers, especially their wages, authority, and power, private life outside of school, equipment issues, and teachers at the point of promotion on which were successful showed significant differences.

**Keywords:** Organizational, Motivation, Hygiene

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# The Usability of Autopoiesis Approach in School Management System

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Autopoiesis was defined as a process of living systems that reproduce and maintain themselves by Chilean biologists Maturana and Varela. At first, being used only as a biological meaning, lately autopoiesis has been used as a term in social sciences as well. Autopoiesis is different from traditional type of system. According to autopoietic approach, organizations don't have to depend on external environment completely. However, this doesn't mean that the organizations are closed and it doesn't mean that organizations isolate themselves from the outside environment because the organizations interact with the environment in order to organize themselves. Therefore, the environment is a part of organization itself (Maturana and Varela, 1980:88-89). Autopoiesis has been conceptualized in three different ways. These are; the its original biological meaning that has been developed by Maturana and Varela, the meaning that the sociologist Niklas Luhmann has contributed to sociology and the meaning in organization theory. Although these three meanings of autopoiesis in different fields may resemble, basically the aspect of autopoiesis in every field is very different.

Depending on the reasons written above, autopoietic system can be considered as an alternative for organizations and process of these organizations' administration. The main purpose of this research is to bring and introduce a new aspect to organizational structure and administration system because it is by all means clear that in this rapidly changing world, we need timeless values and some structures.

Since the topic of this research is interpretive, ethnographic research methods in qualitative analysis has been used. In ethnographic researches data is obtained with observation, interview and examining of document, record works and products. Thus, data is obtained with multiple data gathering technique. The universe of this research is city center of Siirt. The sample is in maximum variation sampling in qualitative analysis has been used. The sample has been divided into two groups. In the first group there are teachers, school administrators, administrators of provincial directorate of national education and parents. 28 people has been interviewed in this group. %36 of these people are teachers, %21 are school administrators, %25 are parents and %18 are administrators of provincial directorate of national education. In the second group, 10 high school students has been interviewed. For interview, at first 12 open-ended questions for the first group and 4 different semi structured interview questions for second group has been formed and an expert opinion has been sought in regard to these questions. Finally, for the first group 8, for the second group 3 questions have been chosen. According to data obtained by the preliminary application questions 2 and 3 of the second group has been reduced to 2 questions in total. Thus, data were collected by 8 questions formed for the first group, 2 questions formed for the second group. Descriptive data analysis method has been used during the interviews.

As a result, being defined as organizations in this research, schools are defined as a social and open system in this current situation. As the nature of this system our schools are affected by

external factors and a permeable structure so it is believed that our schools prevent the creation of an identity of their own. Albert (1985) says that identity is essential for defining the differences of the characteristics of an organization from other organizations. If individually every person has his own identity so it is actually a necessity that organizations have their own identity. It is quite certain that our schools that are forced to create an organizational identity will be forced to create and protect their own organizational culture. Henry Mintzberg (1989) sees culture as organization's ideology or traditions and beliefs that distinct an organization from others and he says that there is a certain life in structural skeleton of the organization. At the point where it is hard to develop and protect organizational identity and culture, the climate will be destroyed. Therefore, autopoietic systems approach can be suggested as a concept that protect and develop the identity and climate of organizations because institutions that have organizational identity have their own culture and this fact separates them from other institutions. It will not be wrong if we exemplify the leading universities such as Harvard, Oxford and Stanford that could constitute characteristic organizational identity. These organizational administration styles are closer to autopoietic administration style. It means that they are not totally independent. However, they do not accept all the input from the environment. In this point it is not a coincidence that such organizations are the most successful ones. It is seen that key to success is knowledge and a rooted and protected tradition.

As a result it can be clearly understood from the answers of parents, students, teachers, school administrators; administrators of provincial directorate of national education that they are worried about schools' being so open to change and being in a permeable structure. Thus, it can be said that social and open system approach and functions of schools should be revised; moreover, autopoietic system approach should be inquired and considered instead.

**Keywords:** Organization, School Management, System, Autopoiesis

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## **A Policy Analysis on the National Education Ministry's School Administrators Appointment System**

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A comprehensive reformation process is being experienced in Turkey's education system with respect to its teleological, structural and operational dimensions. One of the most important pillars of the reformation in education system is the alterations that are being held in the school system. In 2012 with the law numbered 6287 (commonly known as 4+4+4 education regulation), there have been initiated comprehensive changes in formal education system by the amendments in the Primary Education and Education Law numbered 222 and the Basic Law of National Education numbered 1739 and so the compulsory education was lengthened to 12 years with periods of 4 years (primary school, secondary school and high school).

One of the important dimensions of the changes in the school system is the changes in designation system of the school managers. The framework of the changes that are valid today was first formed by "the Statutory Decree about the Organization and Duties of the Ministry of National Education" numbered 652 enacted in 2011. In this decree, it is regulated that the school and institution managers, provided that they passed the written and/or oral exams, are to be designated by the governor to whom they are suggested by the provincial director of national education who takes into consideration their tenure of office, performance and qualifications. These changes were reflected to the instructions of the designation and replacement of managers dated February 28, 2015.

According to the 8<sup>th</sup> paragraph of the 22<sup>nd</sup> article of "the law about the Changes in the Basic Law of National Education and Some Laws and Statutory Decrees", published in the Gazette of March 14, 2014 and enacted so on, suggested by the provincial director of national education the school and institution managers are to be designated for four years by the governor, and suggested by the managers of schools and institutions, the chief vice managers and vice managers are to be designated for four years by the governor. The designations that fall into scope of this paragraph would not cause any vested right with respect to employment rights, designation and commission. By "the Instruction about the Designation of the Managers of Education Institutions Subjected to the Ministry of National Education" dated June, 2014, which was prepared on the provisions of this law, fundamental changes have been put into effect in the system of school manager designation. In this regard, the designation of the school managers will be done for four years and different from the previous instruction, both in the managers' first designation and in the re-designation of the present ones who would have completed four years of service, instead of written and oral exam, the oral exam and the performance and attitude evaluation forms will only be used.

Being one of the essential constituent of education system, the designation of the school managers according to merits and objective procedures is crucially important to have an effective school system. However the provisions that were captured by the instruction dated June 14, 2014 brings about some perplexities and debates. The designation that would be done according to success in the oral exam held with subjectively determined parameters and the performance and attitude forms formed quite flexibly may cause a series of inconveniences.

Indeed, the regulations mentioned above were put into practice, tens of thousands of the school managers in office were evaluated and the managers who are the members of the biggest trade union organized in education sector, the only pro-government one, namely Eğitim Bir-Sen, were evaluated as successful and allowed to preserve their office, whereas the members of the other big trade unions organized in the education sector, namely Türk Eğitim-Sen and Eğitim-Sen, were evaluated mostly as unsuccessful and dismissed from their office and designated as teachers.

This study is a qualitative research patterned as general survey model. In the research, the technique of public policy analysis, which can be taken as a specific form of document analysis, is used in the first place. Public policy analysis can be defined as the analysis and comprehension of the acts and operations that the state authorities engage in or avoid in public sphere. In this respect, to construct an analysis framework, the issue such as the policy itself, by whom and when it is revived and defined, by whom it is executed, the factors that obstruct and facilitate it, how different sectors of society are to be affected by it have to be clarified (Dye, 1987; Anderson, 2003).

The semi-structuralized interview technique is used in the research in the second place and the study group of the research is composed of 11 teachers and 8 school managers who are employed in state primary, secondary and high schools of Ankara province in the 2014-2015 education and teaching years. 5 of the teachers in the study group were previously employed as managers, and they were dismissed from their office after the new system of designation. The aim of the study is to analyze and evaluate the school manager designation policies with regards to comprehensive alterations took place in the National Education System.

The analysis process of the study is going on. The very first findings are as follows: with the transition from the “designation” system to “assignment” system, the politicization have been increased, which has caused/might cause distemper in schools and has brought about/might bring about a series of problems for an effective education.

**Keywords:** Restructuring in education, school administration, quality of education.

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# Effect of Primary and Secondary School Teachers' Perceptions with Regard to School Culture on Directors' Conflict Management Styles

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Organizational culture is defined as unification of beliefs, values, policies, expectations, traditions, perceptions and sensation arranging by influencing thoughts and behaviours patterns (Şahin, 2004). While successful and influential school leaders assist cultural formation, they also have contribution to the formation of cultural staff. This case shows that there is a crucial connection between cultural leaders of organization (Atay, 2001). In the environments where social relations have gained great importance, and where the individuals have different socio-economic levels, values and beliefs, ages, intelligences, abilities and cultures, it is natural that various kinds of conflicts appear at different levels. Changing the results of these conflicts that are possible to be experienced into either positive or negative depends of the reactions of the members of the organization (Özgan, 2011). In order to utilize the existence of conflicts in the direction of realization of the organizational objectives, it is necessary that the sources and the reasons of conflicts be known and determined accurately (Özgan, 2006). Due to this and many other respects, school directors play the key roles in school efficiency (Balçı, 2002). To Karip (2010), the directors should be active in converting the situations into the benefit of organization making use of the conflicting cases. This case, from many aspects, reveals that a school director should possess an efficient conflict management. Therefore, school directors should manage the conflicts utilizing convenient strategies for the benefit of schools. In this study, in this respect, it is investigated whether there is a relation between perceptions of teachers working at primary and secondary schools about school culture and conflict management styles of school directors; and whether school culture can predict conflict management styles of school directors significantly.

## *Method*

This study is in the model of relational scanning. The population of the study consists of a total of 757 teachers 37 of whom are primary 41 of who are secondary school teachers working in the province of Şırnak in 2014-2015 education year. Since the number of the teachers in the population is not many, sampling method is employed. Data from 440 teachers responding to the survey are obtained; however, the data received from 123 teachers who either have not filled in the forms or filled incompletely are not evaluated; therefore, data from the rest 317 teachers are accepted as suitable for analysing. In the study conducted, in order to determine school culture with regard to teachers' perceptions, "School Culture Scale" developed by Şimşek (2003) and in order to determine directors' conflict management styles,

“ROCI II” often named in literature as “Rahim Organizational Conflicting Inventory II” are used. This scale developed by Rahim (1983) was translated into Turkish by Gümüşeli (1994). The frequency, percentage, arithmetic mean, standard deviation, correlation and regression analyses values of data collected by means of scales were analysed in SPSS 16 software program. In analyses,  $p \leq .05$  and  $p \leq .01$  were taken as the bases.

### ***Findings, Results and Suggestions***

In the analyses carried out, it is seen that the schools where the teachers taking part in the survey are working have a powerful but essential to be improved culture ( $\bar{x}=3.62$ ). According to the teachers' perceptions, it is found out that role clearance in school culture sub-divisions and behavioural guidance is being highly developed to be ( $\bar{x}=3.88$ ), school directors to be ( $\bar{x}=3.77$ ), collaboration and confidence to be ( $\bar{x}=3.74$ ), positive human relations to be ( $\bar{x}=3.70$ ), organizational dependence to be ( $\bar{x}=3.69$ ), facilitating values to be ( $\bar{x}=3.66$ ), democratic management and participation to be ( $\bar{x}=3.61$ ), enhancing human resources to be ( $\bar{x}=3.51$ ), motivation and efficiency to be ( $\bar{x}=3.50$ ), control and discipline to be ( $\bar{x}=3.48$ ), teachers' effort and students' success to be ( $\bar{x}=3.45$ ), effective communication to be ( $\bar{x}=3.43$ ), long term employment to be ( $\bar{x}=3.36$ ) respectively.

According to the primary and secondary school teachers' perceptions, it is found out that in general, there is a relation between conflict management style of directors' integration sub-division of school culture and ( $r=.71$ ,  $p<.01$ ) in positive direction and at high levels; on the other hand; between conflict management styles of sub-division of appeasement ( $r=.54$ ,  $p<.01$ ), avoidance ( $r=.33$ ,  $p<.01$ ) and reconciliation ( $r=.66$ ,  $p<.01$ ), and organizational culture in positive direction and in mid levels; and between conflict management styles of sub-division of dominating ( $r=-.32$ ,  $p<.001$ ) and organizational culture in negative direction and mid levels. However, in the end of the regression analysis carried out, it is found out that school culture can significantly predict all school directors' conflict management styles, appeasement, dominating, avoidance and reconciliation. According to these results, it can be said that the fact that the schools own powerful cultures will positively affect the conflict management styles the directors use. Within this context, it is advised that a powerful school culture should be encouraged. In order that the school directors can create powerful school cultures and that they can utilize conflict management styles effectively, awareness can be generated.

**Keywords:** School Culture, Conflict Management, Conflict Management Styles.

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# **The Impact of Secondary Education Teacher's Perceptions of Organizational Justice on Work Alienation (Siirt Province Case)**

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There are a lot of variables which may improve the effectiveness or creativeness or enhance the organizational devotion of the employees in the institutions or organizations. One of these variables is organizational justice (Sayü, 2014). Organizational justice is the perception of the employees as to how fair their institution or organization is (Acar, 2013). Those who do not evaluate the organization or the administrator for/under which they are working in a fair manner may pose negative attitudes or behaviours towards their organizations. (İçerli,2010). Work alienation could be shown as the best example of such negative attitudes or manners. Work alienation is the employee's feeling that his occupation is meaningless, the dissatisfaction of the interactions he/she set up in the workplace, his/her valuing himself/herself as lonely, inefficient and powerless and seeing one as a very simple component of the system (Elma,2003). In the scope of the things above, the aim of this study is to show the relationship between teachers' perceptions of organizational justice and work alienation as well as the impact of organizational justice on work alienation.

## **Method**

A correlational survey model was used in this study. The participants were 1153 branch teachers working all in secondary schools in Siirt Province in 2014-2015 educational year. As the number of the participants was not enough, no sampling was done. Only 366 teachers' answers were regarded as appropriate to be evaluated. "Organizational Justice Scale" developed by Nieoff & Moorman (1993) and Price & Mueller(1986) and translated into Turkish by Yıldırım (2002) as well as "Work Alienation Scale" having been developed by Mottaz (1981) and adapted to Turkish by Erben (2008) were used in this study. The data collected by means of the scales above were evaluated in SPSS 16 program in terms of frequency, percentage, mean value, standard deviation, correlation and regression. P value as  $p \leq .05$  and  $p \leq .01$  was used in the analysis.

## **Findings, Results and Discussions**

The findings or the study show that the perception of secondary education teachers in terms of distribution and process subdimension was "Partially Agree" and the perceptions in terms of interactional subdimension was at a level of "Highly Agree". The powerlessness and alienation to oneself in the subdimensions of the teachers in terms of work alienation was at

“hardly disagree” and the alienation in the powerlessness subdimension was at “partially agree” level. The results of the study show that there is a negative and middle level correlation between the perceptions of secondary school education about organizational justice and work alienation. When the correlation between the perceptions of teachers about subdimensions of organizational justice and the subdimensions of work alienation were assessed, there seemed to be a negative but low level correlation between the organizational justice in distribution and process subdimensions and work alienation in powerlessness subdimension. Moreover, it was found out that there was a negative but middle level correlation between organizational justice in interactional subdimension and work alienation in powerlessness subdimension. It was seen that there was a negative low level correlation between organizational justice in distribution, process and interactional subdimensions and work alienation in the dimensions of meaningfulness and alienation to oneself. Furthermore, according to the regression analysis, it was concluded that the interactional subdimension of organizational justice a stronger predictor of all the subdimensions of work alienation in a meaningful level. Therefore, it may be concluded that the more positive perceptions of teachers at schools have towards organizational justice, the less level there may appear in work alienation levels of subdimensions of meaningfulness, powerlessness and alienation to oneself. In the other dimensions of organizational justice were there no significant impact seen. According to the findings described above, the principles such as honesty, truthfulness, consistency and objectivity in all applications at schools need to have priority. The information flow sistem may be improved and thus some activities may be created to enhance interactions, motivation and moral of the employees. Moreover, some training opportunities which are appropriate for one’s own profession or subject may be provided to teachers to improve themselves.

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## **Employee Silence in Universities: Causes of Research Assistants' Silence**

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The employee silence is one of the issues pointed out in recent years, especially in the field of organizational behavior. However, studies on this subject, especially in the local literature is still very new. Employee silence was expressed by Pinter and Harlos (2001) as that employee who has the capacity to change or correct the situation, hide or don't share the behavioural, cognitive and emotional evaluations related to the development of organizational conditions.

Silence behavior is a common behaviour in the organizations. Ryan and Oestreich (1991 as cited by Morrison and Milliken, 2000) in the United States in their research at 22 the organizations and on 260 employees, %70 of the employees mentioned that they dared not speak openly about of work-related problems or issues. In this study, the process of deciding, the lack of management, unfair sharing, organizational unproductiveness, poor organizational performance was detected within the subjects emphasized as "unquestionable issues". The two reasons that the participants mentioned collectively as the reason for their silence was determined the belief that speaking clearly doesn't create a difference and the fear of taking negative response.

Investigation of employee silence for organizations is very important. Because silence has spillover effects that may turn into remaining silent on several occasions during the process rather than being restricted to an event. Moreover, this situation is affecting organizational structure vertically (Milliken and Morrison, 2003, 1564). According to Whiteside and Barclay (2013, 260) employee silence affects the employees' well being and their performance as well as the outcomes of the organization. Therefore employee silence must be controlled in order to avoid the negative effects. Removal of the causative factors of organizational silence behavior, establishing a civilized and clear communication system within the organization are very crucial in terms of the future of the organizations, success and productiveness as well as providing working environment, peace and health of the individuals, too. (Demir and Demir, 2012). In the lights of this information, the behavior of silence can be said to have a key role in the functioning of the organizations.

The university as an organization need to be emphasized in silence behavior is one of the topics. Indeed having more open communication channels at universities, the ability to communicate freely between top and subordinates, organizational structure which based on trust and information sharing, participating, transparent and pluralistic are very important (Tülübaş ve Celep, 2014). For this reason, this behavior should not spread in the university, and it seems necessary to investigate the cause. The aim of this research is to determine the issues research assisant who work in universities prefer no to speak up and the causes of their silence.

## **Method**

### **Research Design**

This study will be designed phenomenological design, which is one of the qualitative research methods. By the Creswell (2006) phenomenological studies present how several individuals make sense of the meaning of a phenomenon or an experienced concept in their lives.

### **Study Group**

As a study group to do interviews meeting certain criterion is going to be interviewed, 20 research assistants will be selected using criterion sampling method.

### **Data Collection**

In this study, interviewing techniques of qualitative research methods will be used for the collection of data. Data will be collected with the help of semi-structured interview form prepared by the researchers.

### **Validity and Reliability**

Interview preparation will be examined with studies in the literature related to employee silence and will be presented to the expert opinion for content validity. After evaluating the opinions from experts and making the necessary corrections, the interview form will be finalized. In addition, pilot interviews will be held for intelligibility and the language of the interview form.

In order to ensure the outside reliability of the study, characteristics of participants of the research will be defined clearly and the detailed information with data collection and data analysis will provide about processes. Also, the particapants' views were directly quoted in order to maximize the internal reliability of the study.

The data will be analyzed and interpreted by three researchers independently from each other for testing the validity of research results. Indeed, according to Creswell (1998 as cited by Glesne 2012) peer review is one of the methods used in qualitative research to ensure reliability. Later, in order to minimize the differences that emerged between the researchers; these results will be compared to achieve the agreement.

### **Data Evaluation**

The data collected will be analyzed using Nvivo 10 Package Program. The data will be analyzed using the content analysis method. In this context, the data obtained from the interviews will be transferred exactly to the computer. Afterwards, the data will be analyzed using Nvivo.

## Preliminary Findings

As a result of this research, it is aimed to obtain the information about the issues research assistant who work in universities prefer not to speak up and the causes of their silence. Findings will be presented based on studies in the literature and information obtained from the participants. Besides, findings will be discussed with the international scientific data and it will be presented solutions for the research assistants to become more active in universities in accordance with the suggestions of the participants.

**Keyword:** Employee silence, university, research assistant.

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# The Relationship between Learning Problems and Principals' Management Styles at Turkish Schools

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**Problem:** Climate in school, as certain organizational conditions that have impact on organizational life, is able to influence human behaviour and attitudes, and consequently learning environment and student achievement. It is the shared perceptions of school practices, procedures, policies, and individual behaviours as a result of the interactions between students, teachers and principal. School climate is determined mainly by the principals' management styles and teachers' work-related behaviours, relationships among teachers, and between teachers and students. Surrendered by the individual interactions and attitudes within the school, the more positive the learning environment is, the more happy and motivated individuals are, and the more successful the students in the school (Balci, 2005; English, 2006; Guthrie, 2003). For this reason, it is important to have open, supportive and healthy learning environments at schools for both students and teachers, and principals, as school leaders, have the most powerful position in the school to shape the ways teachers and students behave and interact with each other. From this perspective, this study aims to find out the relationship between the principals' management styles and the school learning problems, some restrictive behaviours teachers and students display within schools, as an important predictor of student achievement.

**Method:** This study is a secondary analysis based on a correlational research design (Fraenkel, Wallen and Hyun, 2012). Data, gathered by the 4-level learning hindrances scale and the 6-level principal management style scale, were obtained from PISA 2012 principals survey. Responses were analysed by the methods of bivariate correlation and multiple regression analysis. Within the analysis, the dependent variables are student negative behaviours and teacher negative behaviours, respectively, and independent variables are principal management styles, including the sub-scales of target setting, scheduled working, supervision, participation, appreciation, problem sensitiveness at school. Negative behaviours were defined operationally as the behaviours that come from both teachers and students and hinder teaching and learning at both class and school, and principal management style is defined as the principal behaviours that focus on management tasks and human relations.

**Findings:** First, teacher-related learning problems at schools correlate in a weak and negative manner to the principals' task-oriented management style, to their target-setting, strategic and scheduled working, teacher supervision, as well as relation-oriented behaviours, which are participative and appreciative behaviours. Second, other problems that originate from student side correlate weakly and negatively to the principals' task-oriented management style. Student-originated learning problems correlate only to principals' target-setting, strategic and scheduled working and class supervision behaviours. Moreover, principal management styles

except for problem sensitiveness in school correlate negatively to the problems within school and classrooms. The sub-scales that define principal management style were found to be statistically significant in predicting the scores of the learning problems at schools. All the predictor variables of the management style were determined to account for 11% of the variation in the scores of learning problems. Additionally, after examining the independent variables separately, the variable 'problem sensitiveness' were found to be significant in explaining the learning problems within the schools.

**Conclusion and Discussion:** In this research, a significant negative relationship was determined between the variables of principal management styles and teacher and student-related learning problems in schools. The regression model shows that principal management styles are a highly significant predictor of learning problems in the school, especially those of teacher origin. Principals who set targets, work scheduled under the guidance of targets, supervise classrooms and, surprisingly, avoid involving learning-related problem solving, account for the decrease in the frequencies of school learning problems that principals have to face, teacher origin in particular. Another words, the more task-oriented the principal behave and the less sensitive the principal is to the problems at school, the less the number of learning problems is in the school. To sum up, it is considered that to know the relationship between the principals' management styles and learning problems and school climate will help defining the supportive and restrictive principal behaviours, and providing information for principals about how to behave properly at school to lead the learning environment effectively, thus, the student succes. For this reason, principals should avoid involving problem solving in classrooms and work more task-oriented, following a strategic plan to reach the school targets and supervise the progress.

**Keywords:** Learning problems, management style, learning climate, principals, PISA

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# **Teachers' Perceptions on the Quality of School Work Life in Pakistan, Turkey and the United States**

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The purpose of this study is to investigate the quality of work life (QWL) of public school teachers in Pakistan, Turkey, and the United States. The concept of QWL was defined as a way of thinking about people, work, and organizations whose distinctive elements are (1) a concern about the impact of work on people as well as on organizational effectiveness, and (2) the idea of participation in organizational problem solving and decision making (Nadler & Lawler, 1984). More specifically, drawing from teachers' perspectives, this study aims to describe the work life conditions that schools offer to their teachers and to compare Quality of School Work Life (QSWL) that these three countries provide to teachers.

The study is guided by two main research questions:

- 1) What are the levels of a) administrative support and human development; b) relations with colleagues and embracement of school norms; c) decent and fair wages and benefits; d) healthy work environment, and e) opportunities at work in each countries (Sub-dimensions in the QSWL scale)?
- 2) Are there any differences in QSWL in Pakistan, Turkey, and the Unites States based on teachers' gender, job level, subject matter, and age?

A Quality of School work Life (QSWL) scale has been developed. This new scale, (QSWL), was empirically validated and specifically targeted school settings (Ilgan, Ata, Zepeda, & Ozu-Cengiz, 2014). The data from three different countries obtained by the QSWL scale are compared, and the comparison sought to provide evidence of teachers' perceptions about QWL associated with demographical variables.

Although the concept of the QWL did not appear near the end of the 1960s (Baleghizadeh & Gordani, 2012), it is possible to see that some companies exhausted various efforts to improve conditions for their workers as early as the 1800s (Martel & Dupuis, 2006).

Triggered by the postwar economy, industrialization increased and most organizations chose to adopt Taylor's method (Scientific Management) by the end of 1960s. Taylor's method aimed to improve industrial efficiency by breaking work assignments into simple tasks for the workers. This method provided a great deal of efficiency for companies; however, the dehumanization of work became an issue.

A survey method was used to collect data for this study. The Quality of School Work Life (QSWL) scale was developed and included 30 items. The scale's items were based on constructs found in the literature and past research. Moreover, 15 volunteer teachers answered open-ended questions as a way to generate/create items that are indicators of quality of school work life. The QSWL is a 5-point Likert scale, with the answers: (1) Never; (2) little; (3) Some-what; (4) much; and (5) A Great deal. Higher points in the scale reflected higher level of QWL. The exploratory factor analysis revealed that the scale had five sub-dimensions (see Table 1): Administrative support and human development (explained 17.33% of total variance); safe and healthy work environment (10.32%); economic facilities (9.62%); supportive work environment (8.14%) and human relations (7%). Based on the result of the Exploratory Factor Analysis (Principal Component Analysis), four items were excluded from the scale due to low factor loadings and/or item-total correlations reliability coefficients. Thus, QSWL scale explained 52.42% of the total variance for teachers' quality of work life. Factor loading ranges varied between 0.371 and 0.782. Therefore, the construct validity of the QSWL scale was relatively high. Also, reliability coefficient was also high (.88), suggesting that the QSWL scale was found to be consistently reliable.

Table 1. *Construct Validity and Reliability Analysis of the QSWL*

Dimensions	Number of items	Explained variance %	Factor loadings range	Reliability coefficient	Item-total correlations range
1. Administrative support and human development	10	18.45	0.461 – 0.775	.868	0.414 – 0.726
2. Safe and healthy work environment	4	10	0.644 – 0.688	.753	0.413 – 0.672
3. Human relations among employees	3	8.56	0.541 – 0.754	.591	0.386 – 0.523
4. Supportive work environment	4	8.13	0.471 – 0.719	.654	0.386 – 0.542
5. Decent and fair wages and benefits	4	7.36	0.419 – 0.635	.612	0.410 – 0.546
Total Variance Explained for QSWL: 52.51		KMO: .914		Reliability coefficient for QSWL: 0.88	

The model/factor structure that was shaped with the exploratory factor analysis was retested and verified by the confirmatory factor analysis. Fit index results of the confirmatory factor analysis show that  $\chi^2 / sd$  ratio is reasonable; the root mean square error of approximation and the root mean square residual are acceptable; the goodness of fit index and the adjusted goodness of fit index are weak; the normed fit index, the non-normed fit index and the comparative fit index have acceptable values. It also showed that items' factoring loadings are between .27 and .81, and at a high level; and t values regarding the latent variables' state of describing the observed variables are statistically significant at .001.

## Data sources

**Turkey:** The target population of the study included primary and secondary public school teachers working in different cities of Turkey during the 2013 spring and 2013 fall semester. Participants surveyed were from various cities (Ankara, İzmir, Manisa, Mardin, Isparta and Duzce). Given that these cities are geographically located throughout the country, the participants are representative of the Turkish population of teachers. Participating teachers were selected using cluster sampling. The lists of schools and school districts were obtained from the provincial offices of education. Upon formal permission of provincial offices of education, the surveys were administered in 117 schools. In total, 1000 paper surveys were administered in 6 cities. To ensure a desired sample size, the number of distributed surveys was higher than the targeted sample size. The return rate was high that it yielded a total of 984 responses.

**Pakistan:** The target population of the study included primary and secondary public school in Province Punjab, Pakistan. The lists of the schools were obtained from the Punjab School Education Department of Government of the Punjab, Pakistan. Using cluster random sample, 35 schools were selected from five cities of Province Punjab (Lahore, Sahiwal, Okara, Pakpattan, and Qasur) during December 2013 and June 2014. Data collection is still in progress and hope to complete by August 2014. Out of 352 administered questionnaires, 331 participants completed and returned the surveys. The response rate was very high (94 %).

**United States:** Data has been collected from one school district from the State of Georgia. 318 teachers from schools in the district participated in the survey.

Descriptive statistics (i.e., mean and standard deviation) will be used to describe QSWL and its sub-dimensions in comparison. To compare QSWL in terms of the three countries (USA-TR-PAK), gender, job level, subject matter, and teachers' age, One Way ANOVA and t-test will be used.

## Significance of the study

There are numerous studies for the QWL, but most of them investigate the QWL in industrial organizations. Therefore, this study carries significance by being one of the few studies to explore the quality of work life in educational settings. Moreover, this comparison study promises an international influence since it analyzes expansive data sets from three different countries and their teachers with three different socioeconomic statuses: These are the United States as a developed country that provides teachers a high teacher income; Turkey as a developing country that provides teachers a upper middle income; and Pakistan as a developing country that provides teachers a lower middle income.

**Keywords:** Quality of work life; public school; teacher; international comparison.

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## **THEME 16: Educational Economics and Planning**

# **Educational Indicators Influencing Countries' Achievements According to Programme for International Student Assessment Results**

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This research aims to compare the educational indicators influential in the educational achievement of countries attaining the highest and the lowest achievement in PISA (Programme for International Student Assessment) results. For that purpose, the answers are sought to the following sub-problems:

- a) What are the age range, gross schooling rates according to gender, gender equality index, and life expectancy at school at the stage of pre-school in countries attaining the highest and the lowest achievement in PISA results?
- b) What are the age range, gross schooling rates according to gender, gender equality index, and life expectancy at school from primary education to higher education at the stage of primary school education in countries attaining the highest and the lowest achievement in PISA results?
- c) What is the ratio of share allocated from national income to education and the public expenditure per student at the stages of pre-school and primary school education in countries attaining the highest and the lowest achievement in PISA results?
- d) What are the number of students per teacher and per classroom and the annual teaching hours in countries attaining the highest and the lowest achievement in PISA results?
- e) What are gross schooling rates according to gender and the gender equality index at the stage of higher education in countries attaining the highest and the lowest achievement in PISA results?

## **Method**

The research employs the method of document analysis. The research sample was composed of 30 countries, 15 of which attained the highest and 15 of which attained the lowest achievement in PISA. The relevant data were obtained from OECD (2012), PISA (2014), and UNESCO UIS (2011) statistics. As for data analysis, the percentage of and the arithmetic mean of 30 countries' values are examined on the relevant dimensions and comparison is made with the values of countries.

## **Findings**

A comparison of countries attaining the highest and the lowest achievement in PISA results on the basis of their educational indicators makes it clear that the countries with the highest achievement have better values in the sense of education. Thus, it is evident that all of the students in those countries are provided with better equality of opportunity and of possibility than the ones in countries with the lowest achievement.

Consequently, the countries attaining the highest achievement in PISA results may be said to be in a better position than those attaining the lowest achievement in terms of a) gross

schooling rates, gender equality index and life expectancy at school at the stage of pre-school, b) gross schooling rates, gender equality index and life expectancy at school from primary education to higher education at the stage of primary school education, c) the proportion of share allocated from national income to education, and public expenditures per student at the stages of pre-school and primary school education, d) the number of students per teacher and per classroom, and annual teaching hours at the stage of primary school education, and e) gross schooling rates at the stage of higher education.

### **Conclusions and Suggestions**

Countries holding the highest achievement in PISA results are better off than those holding the lowest achievement in terms of educational indicators. This state demonstrates that those successful countries offer high quality educational services (Aydn, Sarier & Uysal, 2012, s.29, Maya, 2013, s.921).

Based on the PISA results, it may be suggested that it is a prerequisite for countries with the lowest achievement to offer their students the educational opportunities and possibilities equally in attaining the quality in education. Hence, the following suggestions may be made to such countries: a) Pre-school education should be attached due importance and schooling rates should be raised, gender equality should be assured, and the duration of pre-school should be increased. b) Considering the fact that receiving basic education is one of the human rights, measures should be taken in order for each child to benefit from this right. Therefore, 100% net schooling rate should be attained at the stage of primary education regardless of economic status, gender and disadvantaged states; and precautions should be taken to raise the duration of education from primary education to higher education. Problems of drop-outs and children out of school should be removed. c) In order to offer every child the high quality education, the proportion of share transferred from national income into education as well as public expenditures for education at the stages of pre-school and primary school education should be increased. d) In order to ensure high quality education and achievement, educational plans and investments should be made by considering the demographic structure. Within this scope, the number of students per teacher and per classroom should be reduced at the stage of primary education. In countries with a big population in particular, the hours of teaching should be increased. e) Owing to the fact that the high level of parents education is a factor influencing children's academic achievement, the needed regulations should be made in order to raise schooling rate at the stage of higher education and to increase involvement in lifelong learning.

**Keywords:** PISA, countries, educational indicators.

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# Educational Informatics Network Planning

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The purpose of this study is to investigate the planning process of the Educational Informatics Network (EBA) into courses. EBA is an integral part of the FATİH Project, a nation-wide technology integration project in education. Furthermore, the study intends to identify the planning problems and determine how to improve planning process. Another aim of the study, in order to be able to utilize the EBA website in coursework, is to emphasize the importance of transferring the EBA website to the educational environments using a viable and properly operating plan in accordance with the principles in planning process.

## Introduction

There are two highly important processes within education. One of them is planning, and the other is the evaluation. In simple explanation; a plan shows what to do, when and how to do it and by whom it will be done. The purpose of planning in education is to make the education and training activities effective and efficient (İşman and Eskicumalı, 1999).

In its official website, the purpose of FATİH project is expressed as; a project aimed to actualize the IT aided education by means of providing the classrooms with IT instruments until the end of 2013 in line with the objectives indicated in the Information Society Strategy Paper. This paper was published within the scope of the e-Turkey Project and describes the actions in the process of becoming an information society for our country, the development plans, the strategic plan of the Ministry of Education, and the IT Policy Report.

A website was created under the title of "provision and management of educational e-content", which constitutes the second stage of the FATİH Project. As it is indicated in the FATİH Project official website; the Educational Informatics Network (EBA) that was designed by the Directorate General of the Innovation and Educational Technologies in order to enable teachers to utilize effective materials by using information technology equipment in the education-training process. The Web Site is a social platform where teachers will be able to find reliable, suitable and correct e-contents that was subjected to inspection.

The project which is being carried out by the Ministry of National Education, but has many important participants at the government level. It is supported by the Ministry of Transportation; Ministry of Science, Industry and Technology; Ministry of Economics;

Ministry of Finance; Ministry of Development; Under Secretariat of Treasury, and TÜBİTAK (Scientific and Technological Council of Turkey) (Ekici and Yılmaz, 2013). EBA website has been created to create e-content that will be used in smart boards available in the secondary education classrooms within FATİH Project.

Most importantly, suitable education programs should be organized in order to expect teachers to meet their full potential in using information and communication technologies during the learning and teaching process. In this context, it is necessary to well plan the process of integrating technology into the educational programs and to ensure certain developments and improvements in the competencies of teachers. A project that has been implemented without achieving realist arrangement in these fields might bring about the risk of not reaching further than an equipment and infrastructure improvement rather than effective educational programs (Akıncı, Kurtoğlu, Seferoğlu, 2012).

## **Method**

In this study, the planning process of EBA was investigated. Qualitative research methods was adopted and the related literature was reviewed using document analysis method. The documents were analyzed in two stages. First, direct approach (Hsieh and Shannon, 2005) was employed with the use of themes created using planning principles or stages. The planning stages were the themes in this level. In the second stage traditional content analysis was employed, where the codes under each theme was derived from the documents.

## **Findings and Interpretations**

The purpose of the study is to investigate whether the Educational Informatics Network planning is fit for the purpose. In this study, conducting the review of the body of literature, the Document and content analysis was used. However, the comments in the forum websites were used as well. The relevant website was investigated.

When the planning and the purpose of establishment of EBA is examined, it might be thought that the content is numerically at a good level. But, it is the quality rather than the quantity of the material that matters. In line with the information obtained from various teacher portals and forums, it is seen that the teachers encounter with gaps in terms of the e-content.

**Keywords:** E-Learning, FATİH Project, EBA, Informatics

## **References**

The EBA application was developed for arranging and sharing of e-content as a support for the FATİH Project. The most important one of the reasons why the e-content has not reached the desired level is that a professional software team has not involved in the development process. After entrenching the e-content together with professional software group, it should be progressed to the introduction of the website. Another point that should be studied is the equality of access. The FATİH Project, from access point of view, should consider that there are students who do not have internet, computer and even electricity in their homes in Turkey. For this reason, the EBA plan should be supported with other planning such as Let the Schools be Alive. The planning can be strengthened by ensuring that those students who cannot find the means in their homes can use the resources at schools at any time of the day.

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## **Analyzing the Village Institutes' Planning Stages: Status Assessment**

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Planning is the process of bridging the gap between where we are and where we want to be in the future. Planning is a decision-making process which involves choosing a course of action amongst alternative choices by declaring a mission, series of objectives and the ways to achieve them (Wehrich, Koontz, Cannice, 2008). Social planning involves a vision of a society we want to live in. From an educational point of view, it is a map of a road the society want to follow to reach an educational system that educates the persons who will shape the future of countries and increase the social and economic wealth of that nation. Educational planning also tries to ensure the equal opportunity in participation in education as well as using already limited resources in an effective and efficient manner for a higher quality lifestyle.

Educational planning involves several stages. These stages were summarized as: status assessment, predicting the future, selecting various courses actions, budgeting, reporting, approval, application, and evaluation. The status assessment is the starting point of the planning process where a picture of the current situation is taken to predict the future and select the courses of action (Karakütük, 2012). Planning is most important where limited human and financial sources are very limited. The first 30 years of the Turkish Republic was such a time where especially human resources were limited.

During the first few decades of the republic the majority of the population was living in the rural areas. The villages were underdeveloped and carried the effects of the long wars leading to the establishment of the Republic. Series of reforms were started, with the establishment of the republic, in 1923 that aimed to develop the country in all fronts. To successfully carry out these reforms, education was seen as the key area and the new education system was given serious responsibilities in these efforts. The idea that social and economic development of villages, thus the country, would only be successful by means of educating the majority who were the villagers. The idea was suggested and discussed by domestic and foreign scientists, in government programs or the various assembly meetings if the era. Following these discussions the first Village Institute was established in Eskişehir Çifteler in 1937 for trial purposes and gained formal identity afterwards and had been the greatest deliverer of said objective (Akyüz, 2010). Until they were closed in 1954 there were 21 Villages Institutes and they educated 17342 teachers, 8756 educators, and 7300 medical officers (Altunya, 2010). Thus, the establishment of an important system in Turkish education history requires attention.

## **Purpose of the Study**

Educational planning consists of certain stages. The first and the most important one for understanding the issue is the "status assessment" stage. This study analyzes the establishment of the Village Institutes in terms of "status assessment" among the educational planning stages. For this purpose, the study examined whether any "status assessment" stage was done and if so how was this carried out. The study focuses on the pre-planning process of the establishment of the Village Institutes that are highlighted in the documents and reports prepared during the period until the Law on Village Institutes gained functionality. The study also examines if the said numbers and statements are in line with the country's statistical database.

## **Method**

A qualitative paradigm is being followed in the study; in what stages the "Due Diligence" for the Institutes at each level were carried out is analyzed by means of document review, one of the qualitative research methods. Descriptive analysis method is used in the analysis of the data (Yıldırım and Şimşek, 2008). The subject is studied under 3 subheadings consisting of the content of the studies for the general determinations about the village life and village education, the studies for the number of village schools and the number of students that were being educated and not educated in the villages based on the village population data, and the themes of the number of teachers serving and required in the village schools. In the study, document diversity is ensured by examining all the legislation associated directly or indirectly with the Village Institutes, reports prepared by the foreign educators and scientists of the era, the works of İsmail Hakkı Tonguç who is the father of the Village Institute idea, and the statistical yearbooks. Library databases (Web Of science, EBSCO etc.), TÜBİTAK and YÖK web portals were searched using the keywords of "educational planning", "village education", and "village institutes", and the books, related research reports, TBMM meeting minutes, relevant laws and draft bills, government programs and government congress minutes were reached to.

## **Findings and Conclusions**

The study results showed that a serious status evaluation process was carried out when creating the Village Institutes. Furthermore, the works and reports prepared by İsmail Hakkı Tonguç in light of the opinions obtained during the visits to various parts of the country were in conformity with the formal statistics. In general, the majority of the studies for the village education demonstrate consistency. It is observed that all the data used in the status evaluation stage were at a reliable and measurable level, and the relevant documents were used and reasoning was documented.

**Keywords:** Educational Planning, Village Education, Village Institutes, Planning,

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## **To Be Appointed or Not To Be Appointed: Issues, Challenges and Recommendations**

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In developing countries like Turkey, human resources planning is not taken into consideration enough. Particularly for educational organizations, teachers have been trained without projecting teacher demand. It causes teacher shortage/surplus. As a result of non-existence of systematic and consistent human resources planning in education, the problem of non-appointed teachers has revealed.

Human resources planning is essential; it means projecting the number and quality of needed employee shortages in each department of the organization, determining available categories of human resources and it can be used to decide on how and where to find the required human resources (Karakütük, 2012). It requires predictions about many ambiguous and changeable structures of the unforeseen future (Başaran & Çinkır, 2013). All told, it can be said that human resources planning is an indispensable to make use of human capital efficiently.

Education is an important factor for quality of human resources, but without a strategic planning, well trained people remain unemployed. Turkey is a great example of this situation. According to Youth with statistics research of Turkey Statistical Institute (Türkiye İstatistik Kurumu [TÜİK], 2013), 16,6 % out of total population consists of the youth (15-24 age). almost 5 million people have been studying at universities (Higher Education Council-Yüksek Öğretim Kurulu [YÖK], 2014). On the other hand according to TÜİK (2014) workforce statistics, the unemployment rate in 15-64 age group has become 10,9%. TÜİK data have pointed out that people from different areas of expertise in Turkey, have significant problems in access to employment. One of these unemployed groups is teachers. While the number of graduates from faculty of education rises, the number of non-appointed teachers rises, too. Teachers have been selected according to Public Personnel Selection Exam because of teacher surplus (YÖK, 2007) since 2002. It is possible to say that those exams can be signals of the problem of non-appointed teachers.

With the advent of evening education, open university, increasing quotas of faculties of education and pedagogical formation (YÖK, 2007), out of field teaching (Çinkır & Kurum, 2015) the gap between teacher demand-supply can become bigger. These factors have triggered off the problem of non-appointed teachers. YÖK (2014) has enabled about 62 thousand candidates to earn teaching certificates in the 2014-2015 education year. On the other hand out-of-field teachers consisted of over 50% of the total number of teachers in Turkey (Çinkır, 2013). About 300 thousand teachers have been waiting to be appointed (Eşme, 2014). Sağıroğlu (2013) has also stated that non-appointed teachers have been employed as a paid, contractual or substitute teacher or at private schools or courses with less

payments. According to the questionnaire of Non-Appointed Teachers Platform (2014), 38.33% of participants have thought of committing suicide. Furthermore since 2006 over 40 non-appointed teachers have committed suicide (İnce, 2014). In this context, the purpose of this study is to identify the problems of non-appointed teachers and to make recommendations for overcoming these problems. In accordance with this purpose, the following questions were answered:

1. What are the underlying reasons for the problem of non-appointed teachers?
2. What kind of problems do non-appointed teachers confront?
3. What type of recommendations should be made to solve these problems?
- 4.

In this study, a qualitative research method and phenomenological research design will be used. The data will be gathered from non-appointed teachers, educational politicians and academicians in the field of educational planning by means of semi-structured interview form. The non-appointed teachers will be reached via Non-Appointed Teachers Platform on Facebook. Furthermore, the shared data at this platform on Facebook will be used to reveal the problems of non-appointed teachers. Content analysis technique and NVIVO program will be used to analyze the data.

The problem of non-appointed teachers is getting serious increasingly and this makes people being disappointed. The underlying reasons for this problem may be grouped into inconsistent educational policy and unsystematic human resources planning and higher education practices like evening education, pedagogical certificates. It is expected that one of the biggest problems of non-appointed teachers can be unemployment and because of unemployment they have to put off their life events like marriage. The problems of non-appointed teachers can be solved by decreasing quotas of faculty of education, founding professional unions, which advocate non-appointed teachers' rights, decreasing the number of students per teacher, terminating such practices as out-of-field teaching and pedagogical formation or offering attractive retirement opportunities.

**Keywords:** non-appointed teachers, teacher employment, human resources planning.

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## **Economy Policy of Pedagogical Formation Program**

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The fundamental function of education is to actualize socialization of individuals during the social reproduction process. This function has gained importance through the capitalist social relationships and the presence of modernism as a life style, and schools have turned into areas where citizenship and accordingly individuals specific to new capitalist society are produced to the extent education is institutionalized. Whereas family, factory, and schools have a special meaning as the areas where discipline and supervision mechanisms of capitalism, and accordingly modernism, emerges, the state has prepared detailed framework of educational system producing citizens, namely individuals specific to capitalism (Ercan, 2011).

The transformation experienced in universities is related to provide scientific information production and labor power actualized under the supervision of capital as more secure and legal in parallel with the global surrounding of capitalism.

The most developed propositions of theoretical efforts for explaining the transformation of universities include commodification of science and education, breaking into the market, and creating an international academic labor market. Commodification of products is ignored to be a result of the change experienced in process of production, or these results have not been adequately examined (Narin, 2009).

As Marx expressed in Capital, any product or service within a specific social relationships system can turn into a commodity. Science, information and education have also turned into commodity within the sense of a specific social relationship between property owners and producers. In a capitalist society, no commodity or service can protect itself against commodification; because each commodity or service (not only physical assets but also intangibles such as information and skill) can be owned; and for that reason they can be an issue of an exchange. Production of any commodity or services produced to be purchased or sold in a capitalist market is obliged to be actualized in a process in accordance with economic rationality principles (Ünal, 2010).

Neoliberalism is an ideological formation established upon rhetoric concepts such as personal freedom, individuality, competition, and personal responsibility that have provided capitalism to overcome the crisis in 1970s. As specified by Kurul, "Capitalism that actually globalizes has been proceeding its way differentiating the capital accumulation processes as well as

purifying the state from its “social” qualities. In this process, reactions of working classes and unemployed and other public classes are intertwined differently. Social struggles, quality of capital accumulation processes and transformation in state emerge differently (Kurul, 2009). There are several economic approaches providing various determinations and definitions related to unemployment. Different economic approaches discuss unemployment differently in terms of its definition and reasons. Firstly, the unemployment and relevant definitions in neoclassical economy called as the main approach economy accepted as the basic determinant of current economy has been discussed.

As result of discussing unemployment separate from the social system, not establishing its relationship with social classes, and ignoring that working is imposed as an obligation especially for the working classes, it can be been assumed that individuals accept unemployment voluntarily (Karakul, 2012).

Majority of the postgraduate unemployed people in Turkey includes graduates of educational faculties and people who have acquired the competence for carrying on teaching profession receiving pedagogical formation certificate. Of course this should be considered separate from “flexible working” as a new working style emerges as result of neoliberal policies of capitalism. Because deskilling of employees due to flexible production organization of employees, taking technical supervision away from work, substituting works that require education into each other have all increased the number of employees at different educational levels. So that flexible production systems not decreased unemployment as promised but increased the unemployment of unqualified work labor (Kiraz, 2014).

Although unemployment of educational faculty postgraduates is high in Turkey, increasing the number of unemployed teachers having education called as pedagogical formation provided to all educational faculty postgraduates through YÖK (Council of Higher Education) decision adopted on 17 April 2014 have caused creating a hope market, marketization of education, and commercialization of universities.

The aim of this study is to reveal commercialization of the universities by opening pedagogical certificate programs through the departments of educational sciences within the faculties of science and letters and education, for which students pay a high cost.

## **METHOD**

### **Research Approach**

Because this research aiming to analyze marketization of education and commercialization of universities within the framework of pedagogical formation programs has the basic purpose for describing the present, it has been carried out in screening model. Using purposeful sampling method, depth interview technique will be used. Interviews will be held with academicians lecturing in Artvin Çoruh University, Çankırı Karatekin University, Kastamonu University, and Tokat Gaziosmanpaşa University where pedagogical formation has been provided.

The research will be carried out through semi-structured interview form. While developing semi-structured interview form, relevant literature will primarily be revised. Subsequently, a semi-structured interview form will be prepared, and views of an expert on relevant field will be asked in order to provide content validity of the form. In accordance with expert views, interview questions will be finalized. In order to provide reliability in interview questions, the

interview will be recorded to a tape recorder, and consistency will be provided reporting the interviews. After analyzing the interviews, data will be coded to a specific extent, and consistency will be provided.

The interview data will be collected through “depth interview” method. So that information related to the research subject will be tried to be obtained in details, and the collected data will be reported within the framework of qualitative research principles.

Interview records that will be kept during the research will be analyzed by the researchers, and those will be turned into texts on computer environment. The data that will be obtained from the interviews with academicians will be evaluated using descriptive data analysis as one of the qualitative data analysis techniques.

**Keywords:** Commercialization of universities, pedagogical formation, teacher unemployment

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# **How Marketisation in Education Changes the Society: Neofeudal Transformation in Turkey**

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Meritocracy implies that the distribution of social status in modern societies is different from feudalism as it depends on merit, not family background (Young, 1994). Due to meritocratic claims, modern societies are open in terms of social mobility and if the individual is intelligent enough and he exerts sufficient effort, education will provide him the opportunity to move upwards (Olssen, 2004: 2-4). Thus, the function of the education systems in modern societies is to secure equality in distribution of social status depending on the merit of individuals. That the education system is fair, it is claimed that the hierarchy that comes after should also be considered as fair (Torun, 2009: 90). No matter which social status the individual occupies in the society due to his family background, education gives him the opportunity to move to a position according to his intelligence and effort. Even so, education does not provide equal opportunities for all (Apple, 2006: 52). Children from disadvantaged social groups are also disadvantaged at school to be successful because the legitimate cultural capital at schools, stems from the dominant culture and since the cultural capital is a matter of social class, it is almost impossible for lower class children to be successful at school (Bourdieu & Passeron, 2000: 9).

However, welfare state is accepted as a more equalitarian agent as it intervenes the society by extending the opportunities of education enabling the access of more people and by opening the ways for social mobility. Under the establishing conditions of the Turkish Republic in which modern social classes had not emerged yet, the ideological preferences of the founders were the only determinant to shape the education system and thus, the modern education system in Turkey was to train modern citizens more than to reproduce the social diversities (Sayılan & Yıldız, 2009). So it was the level of the capitalist development and the public education arrangements accordingly which enabled vertical social mobility. However as capitalism developed the relationship between education and social mobility changed and especially after the neoliberal integration of the 1980's when the idea of the welfare state had started to lose power, it has almost hit the bottom. This paper aims to define how the neoliberal policies in education transformed Turkey into a neofeudal society by segregating the educational opportunities of different social classes while liquidating the welfare state.

## **Method**

This study holds a descriptive survey model that evaluates the educational policies in Turkey by examining the statistical data on public and household educational expenditures and on the numbers of schools and students. Also, the related policy papers and studies on education and PISA results are evaluated in order to find out how the neofeudal transformation works.

## Findings

Through the neoliberal transformation in Turkey, the public investment in education has declined by increasing the household expenditures consequently. In 2013 the number of private schools has become 12 times and the number of private school students has become 4 times more than 1986. Public authorities still insist on marketization policies by attempting to increase the share of private sector in education. Results of PISA 2012 (OECD, 2013) demonstrate that the private school students are more advantaged than the public school ones as there are less students per classroom and less students per teacher. Countries that conduct equalitarian social policies in order to narrow the differences between the socio-economically advantaged and disadvantaged students seem to manage to increase the level of educational success totally by decreasing the effect of those differences. That educational household expenditures in Turkey increase while the public expenditures decrease, the qualification of the schools become more dependent on the profile of the parents at each school. Thus schools segregate in terms of the parents' socio-economic status. Public schools even at the primary level segregate according to their location and facilities. Vocational high schools are known to belong to lower classes. There are also elite schools that the upper class parents pay very high fees in order to prepare their children for elite positions in the society. And now the National Ministry of Education intends to make regulations for private schools that segregates them into 4 categories. Educational investments of all the income groups in Turkey has been rising while the expenditures of the upper income groups rise more significantly. Intergenerational mobility in Turkey seems to be quite low. The educational level of the 66% of the youth is the same with the previous generations. And 91% of the families whose educational level didn't change through generations belong to the group of the lowest educational attainment.

## Results

The welfare state was the most meritocratic setting in modern society. After the liquidation of the welfare state, by marketisation policies in education in Turkey, there emerged a neofeudal transformation that the family background effects educational success more than before. In this neofeudal society, social status are distributed according to the advantages provided by the schools that are segregated in terms of social class. Thus, it can be claimed that under neofeudalism in Turkey, social status is not related with the individual's merit but with his/her family background.

**Keywords:** Neofeudalism, neoliberalism, marketisation, meritocracy

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## **THEME 17: Educational Law**

## Do schools have legal personalities? Should they?

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When considered as an organization, school, which suggests both a building and an institution, refers to a social group including a teaching staff, students, administrators and parents (Bilhan, 1996, 17). In the dictionary prepared and published by Turkish Language Association, the concept of school is defined as a place where all types of education are performed collectively. Başaran and Çınkır (2011, 139) defines school as the organization that enables to learn the required behavior to reach the preapproved pedagogic goals within a preplanned process in a certain amount of time.

The notion of education in Turkey has flourished by acknowledging it as a fundamental public service under the influence of social, political, and economical motives, which has substantially led education and school administration to be organized as a centralist sub-system of Turkish public administration which is in convenience with the centralism of a unitary state (Güler, 2000, 29). In this regard, in accordance with the article 123/II in the Constitution, the principles of centralization and decentralization on which the foundation and duties of the administration are based should be briefly explained. Centralization is the process by which presenting public services become concentrated within a particular location which is called the capital, the center of the state. Nevertheless; in Turkey along with centralization, local administration system is exercised in the form of decentralization in terms of both location and certain services. Therefore; beside the legal personality of the state, other public legal personalities come to being. In this case, the unity between centralization and decentralization is facilitated through administrative tutelage (Günday, 2011, 84).

“Legal personality is the group of people and commodities that are organized in an attempt to achieve an independent entity on its own and a certain goal and are legally entitled to the power to own rights and debts.” Depending on this definition, the existence of a mutual goal (or mutual interest) on which all the parties can agree is a prerequisite. (Akipek, Akıntürk ve Ateş Karaman, 2012, 508).

Depending on the law they are subjected to, legal personalities are divided into two categories: public legal personality and juridical personality (Akipek, Akıntürk ve Ateş Karaman, 2012, 519). While public legal personalities are constituted by law (Günday, 2011, 79), juridical personalities are legal personalities that are conducted and operated in accordance with the principles which are agreed upon by the free will of the individuals who created them and the rules of private law (Dural ve Öğüz, 2004, 212, 213). Since legal personalities are groups of people and commodities that are organized to serve for a certain mutual goal and to be independent and permanent, at this point the benefits and downsides of having a legal personality for schools will be discussed.

The purpose of this study is to examine the benefits and downsides of having a legal personality for schools. In order to achieve this goal, this study based on reviewing of literature. In this regard, the first part of the study looks into the notion of school and its position in Turkish Education System. Following this, the notion of legal personality is elaborated and public legal personality and its characteristics and juridical personality is explained. Later, the circumstances that might appear in case schools have legal personalities are examined in regard to advantages and disadvantages.

As the final part, it has been pointed out that Ministry of National Education is in need of alterations that will moderate the strict centralization. What needs to be done in this regard is to provide schools with authority on the subjects which will be decided by the centralization. To illustrate, whereas the content of the educational program is outlined by centralized management, which in this case is the National Ministry of Education, schools might be authorized on modifying the curriculum with regards to regional demands or the needs and deficiencies of their students. Similarly, it is clear that in EU applications of school-based administration, the policy and decisions of member states has been established within the frame of national policy and decisions. However there is also a close cooperation and coordination between local government units and the ministry of education (Özmen and Hozatlı, 2008, 170).

**Keywords:** Legal personality, school, centralization, decentralization

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# **Responsibilities of School Principals in Preventing and Solving Incidents of Child Abuse and Neglect**

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Children are individuals who are in need of care from birth onward, interacting with adults as they grow up. In addition to individuals who had healthy childhood with adults, which constitutes the first stage of human life, there are also children who, unfortunately, endure abuse and neglect in a variety of social environments (Karaman-Kepenekci, 2001). According to Karaman (1993), "child abuse" occurs when children are exposed to non-accidental situations or circumstances that adversely affect their physical, emotional, mental, or sexual development or harm their psychological well-being by persons, especially by their parents, who are obliged to look after them, and by other adults. "Child neglect," on the other hand, is when a child's physical or mental health or the development of his/her physical, emotional, moral, or social development is hampered due to negligence on the part of the persons responsible for their care, especially their parents, and other adults to meet such needs as food, clothing, shelter, education, health, and love. Abuse is an active deed, whereas neglect is a passive deed in the form of non-fulfillment of the most basic responsibilities (Akyüz, 2010).

There are three types of abuse: physical, emotional, and sexual; while neglect occurs in two forms; physical and emotional (Akyüz, 2010; Karaman-Kepenekci, 2001). Additionally, there is also economic exploitation and it has been stated that in today's society, working children are not only exposed to physical abuse, but also to economic exploitation (Bahar, Savaş and Bahar, 2009; Yolcu, 2009).

Children spend a large portion of their time at schools. Bringing their family experiences to school with them, children also carry the effects of the abuse and neglect they experience in their family to school (Karaman-Kepenekci and Nayır, 2012).

The binding international legal text concerning the prevention of child abuse and neglect is the "Convention on Children's Rights," adopted by the UN in 1989. The Turkish Constitution includes various provisions relating to children's rights and child protection.

School principals are generally responsible for the execution of all school events and activities in a form suitable for the desired purpose. Within this context, school principals hold various responsibilities in areas such as staff, educational activities, student affairs, and so on. Of these, the responsibility related to student affairs also encompasses the prevention and resolution of cases of child abuse and neglect. The main responsibility of school principals in relation to the prevention of child abuse and neglect is the identification of abused and/or neglected children. It falls within this scope of responsibility of the principals to observe any changes in students such as being covered with bruises, showing signs of being emotionally withdrawn, and appearing sad and dispirited (Ergin, 2007).

Addressing issues of child abuse and neglect as a part of the agenda at events like school board and PTA meetings will enable the prevention of abuse and neglect incidents in the long term (Şahin and Beyazova, 2001). Sexual abuse prevention activities should be carried out under the supervision of school principals. The prospect of identifying and informing children who constitute a risk group in terms of sexual abuse and empowering them in terms of knowledge and skills against the likelihood of being subject to abuse are measures being considered within the scope of prevention activities (Çeçen, 2007).

School principals hold certain responsibilities for the resolution of cases of child abuse and neglect. Firstly, the obligation to notify social service agencies and legal authorities when necessary about the status of children who are suffering abuse and neglect rests with school principals. This notification will ensure both punishment for the abuser and a relief for the student from abuse and neglect (Ergin, 2007). Additionally, public school principals, when they learn that a crime has been committed relating to their duties, are required to report the case to the relevant authorities in pursuant to Article 279 of the Turkish Penal Code (Akyüz, 2010).

### **Purpose**

The purpose of the study is to put forth the responsibilities of school principals in relation to the prevention and resolution of cases of child abuse and neglect.

### **Method**

The responsibilities of school principals in relation to the prevention and resolution of cases of child abuse and neglect will be discussed in this compilation study by examining relevant literature and legislation.

### **Conclusions and Recommendations**

School principals are under legal responsibility for the prevention of child abuse and neglect. It is within the scope of the responsibilities of school principals to provide reliable and safe educational environments for students, to take the necessary measures against violence within and around school premises, to stay informed about the issue of child abuse and neglect, and to notify social service agencies and legal authorities of incidences of abuse and neglect.

It can be seen upon the examination of international law that there are detailed provisions on child abuse and neglect. In Turkey, the proper articles of the Turkish Penal Code and Juvenile Protection Law aim to protect children from abuse and neglect. Considering the legislation by the Ministry of Education, the issue of physical abuse and neglect has been included more frequently than other types of abuse and neglect. In the "violence action plan" and other legal texts by the Ministry of Education, the responsibilities of school principals with regard to child abuse and neglect are mentioned. However, detailed legislation on child abuse and neglect at schools can be said to be missing. Furthermore, regarding the responsibilities of school principals, the protection of students from physical abuse and neglect seems to be given particular importance.

**Keywords:** Child abuse and neglect, school principalal, responsibility

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**THEME 18:**  
**Foundations of education**

# **Motivational Orientations and Positive Teacher Perceptions of Student Teachers Participated Teacher Certification Program at Muğla Sıtkı Koçman University**

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Participation is one of the most researched topic in field of adult education (Lowe, 1985:214). These researchers investigated adults' participation reasons, motivations underlying the participation, participation barriers and characteristics for participating adult education activities.

Participation behavior in the context of motivational orientation explored first time by Cyril O. Houle, and he identified three types of adults: goal, activity and learning oriented (Duman, 2007:151-2; Knowles, 1996:44-45). Later, Houle's classification was starting point of many motivational orientation researches (Boshier, 1971; Boshier, 1977; Boshier, 1991; Lieb, 1991; Tezcan and Duman, 2014). Adults participating educational activities for many reasons. In Turkey, after reconstruction of Higher Education Council in 1997, Teacher Certification Program offered under variety of titles (Okçabol, 2005:133) and mainly including many university graduates of the Faculty of Arts and Sciences, participate program for become a teacher. In Teacher Certification Program, conducted by Department of Educational Sciences of Education Faculties, the aim is achieving necessary pedagogical content knowledge for teaching to participants. On the other hand, researches on characteristics of teachers should have take place in literature (Okçabol, Akpınar, Caner, Erktin, Gök and Ünlühisarcıklı, 2003:49'dan aktaran Okçabol, 2005:261).

With motivational orientations of student teachers participated Teacher Certificate Program, and how they want to be a teacher and positive features of academic members they received a role model makes this study important.

## **Purpose:**

In this study, it's aimed to determine motivational orientations and positive teacher perceptions of student teachers, participated Teacher Certificate Program and take "Lifelong Learning" lesson, at 2013-2014 academic year the summer period in Muğla Sıtkı Koçman University.

## **Method:**

Quantitative and qualitative methods were used in this research. Descriptive survey model is "the research approach intended to describe the situation in the pastorextant" (Karasar, 2004:77). In this study, a questionnaire was applied to student teachers for determine the motivational orientations and qualitative data were collected by standardized open-ended question.

The research population is the student teachers, participated Teacher Certificate Program and taken “Lifelong Learning” lesson, at 2013-2014 academic year in Muğla Sıtkı Koçman University. 253 student teachers attended the lesson at the week of survey.

In the quantitative part of the study, 40 itemscale, developed by Duman (2004) and Cronbach's alphas internal consistency coefficient is calculated as  $\mu=85$ , was applied to student teachers. The questionnaire consisting of two parts, demographics and items related three motivational orientations, and four point likert scale used in. 177 valid questionnaires were collected in the study. Qualitative data were collected by answers to the standardized open-ended question about which academic member taken as model and it's reasons.

Quantitative data were analyzed by using frequency, percent, arithmetic mean, independent t-test, ANOVA and MANOVA in SPSS 20 package program.

Analysis of the data collected by qualitative way, inductive content analysis approach was used. Accordingly, first researchers were reached the codes from the responses to open ended question and then the codes were classified under specific themes. Then findings were defined and interpreted (Yıldırım and Şimşek, 2005:227-8). The frequency of each theme was expressed by numerical values. Direct quotes were allowed for to support the findings.

### **Findings:**

The findings obtained as a result of this research are as follows: 58.2% of student teachers are women; 59.3% of 25 and under years old; 88.7% of have graduate degree and 61.6% of unemployed. According to three motivational orientations, goal oriented (%48,1) followed the learning oriented (%49,1). Characteristics of the academic member, is the most received role model by student teachers, are “to be critical, to be knowledgeable, instruction, be respectful to students and to present different perspectives”. These condacademic member's characteristics, “mastered the subject, practices a student centered education in the classroom, and his teaching style”, were evaluated as positive.

### **Conclusions and suggestions:**

According to the findings, most of student teachers are unemployed graduates and it can be suggested that they participated Teacher Certificate Program for be appointed as a teacher and have a job. Distribution of motivational orientations, the rate of the goal and learning orientations are nearby and it can be interpreted that student teachers values vocational reasons and academic learning. Based on the data obtained from this research, it is advised that while planning Teacher Certificate Program, learning needs of student teachers should be considered.

**Keywords:** Teacher Certification Program, Student Teachers, Participation, Motivational Orientation, Positive Teacher Perception.

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# **A Study on Student's Learning Styles and Self-Regulated Learning Towards Academic Success in Maths**

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In this research its aimed to study the relation between secondary school student's self-regulated learning, student's learning styles and their academic success in maths. Besides, it's also aimed to study whether their learning styles and self-regulated learning differ according to their gender and class level. with this aim the questions below are tried to be answered;

- 1) What is the secondary school students' self-regulated learning level?
- 2) What kind of divisions does secondary school students learning styles show?
- 3) Do secondary school students' self-regulated learning and their learning styles differ according to their
  - Class levels
  - Genders ?
- 4) Does secondary school students' academic success in maths differ according to their learning styles?
- 5) Does secondary school students' self-regulated learning differ according to their learning styles?
- 6) Is there a meaningful precursor for secondary school students' self-regulated learning maths academic learning?

This research including examination of secondary school students self-regulated learning skills level and learning styles according to different variables and if there is a meaningful precursor for students self-regulated learning skills maths academic success was designed according to relational scanning model.

Population of this research consists of secondary school students in randomly selected schools operated by the Ministry of National Education in 2014-2015 education year. 344 students are male and 335 are female of 679 students participated in the research.

In this research two different data collection tools were used. One of them is Köse III learning styles inventory which was adapted to Turkish by Gencil (2006) and last version of learning styles scale developed by Kolb. The other one was self-regulated learning scale developed for determining students self-learning styles skills.

Kolb learning style inventory used learning style inventory which was designed 1971 and later slightly changed and developed 1991 by Kolb for determining students dominant learning styles.

It shows which learning style is more appropriate for the students. In addition, in this inventory for learning styles were described.

Self-regulated learning scale was developed by Haşlaman (2011) to determine secondary and high school students' self-regulated skills. This scale consists of 17 items in prediction stage, 21 items in application stage's control sub-dimension and 11 items in monitoring subdimension, 10 items in evaluation stage ( 59 stages in total) and 4 factors. Items in the scale were designed as 1-10, 1 represents "it doesn't reflect me" and 10 is "it definitely reflects me". Factors Cronbach Alfa parameters changed from 0,90 -0,91 Cronbach Alfa parameter was calculated as 0,97 for the whole scale. Calculated factor's Cronbach Alfa parameters in this research changes from 0,87-0,96. In this research Cronbach Alfa parameter was calculated as 0,97

Descriptive statistics for analysing data collected in this research and determining students self-regulated learning skills level, unrelated sample t test for comparing secondary school students' self-regulated learning skills according to their gender, one way Anova for unrelated samples in comparing students maths grades with their learning styles were used. Besides, kay-kare test for comparing students' learning styles with their genders and class level was used. Simple linear regression analysis was used to determine whether students self-regulated skill points is a meaningful precursor for their math points. Significance level was accepted as .05 in this research.

1) According to results of the research;

Secondary school students' self-regulated levels are above average and their levels differ meaningful according to their gender. Female students' self-regulated learning levels are higher than male students in prediction, control and monitoring sub-dimensions. In reflection stage no meaningful difference was observed. When class level variable was considered, secondary school students' self-regulated levels and sub-dimensions differs in different class levels; in prediction stage ,a sub-dimension of self-regulated learning, 5th grade students' self-regulated learning levels are higher than 7th and 8th grades and also 6th graders' levels are higher than 7th grader's. In control stage, 5th grade students' self-regulated learning levels are higher than 7th and 8th grades and 6th graders' levels are higher than 7th and 8th grade students'. In monitoring stage, 5th grade students' self-regulated learning levels are higher than 7th and 8th grades and also 6th graders' levels are higher than 7th grader's. In self-reflection stage ,5th grade students' self-regulated learning levels are higher than 7th grades and also 6th graders' levels are higher than 7th grader's.

2) It was seen clearly that there is a meaningful difference between students' learning styles according to their class levels. Students' learning styles don't differ according to gender. Their learning styles are similar.

3) Learning styles of students who have the highest success level are establisher, changer, absorber, decomposer. But these differences don't seem meaningful.

4) In prediction and monitoring stages which are the sub-dimensions of self-regulated learning self-regulated learning levels of the students who have changer styles are higher than the students with other styles and differences seem meaningful. In control and self-reflection stage differences between groups don't seem meaningful.

5)It was observed that Self regulated learning is a meaningful precursor for academic success in maths.

**Keywords:** learning styles, self- regulated learning, academic access in math

## Political Education of Women: Example of Ka.Der

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**Purpose:** Education of awareness raising includes the processes which will bring a critical perspective regarding the social gender roles, motivate women to understand and change the practices keeping them out of the politics and raise consciousness. Training programs are distinctively important which will create an alteration in perspective and awareness, and empower women in general. In this context, it has been researched that whether this training program about politics and citizenship, which is organized for women, leads the participants to change their perspective regarding active citizenship and involve in politics. The aim of this research is to determine the dynamics of participation in the training, expectations and educational acquiresments of women who participated in the Project of the 'Empowerment of Women Citizens'' conducted by KADER in the context of gender issue.

**Methods:** The sample of the research was composed of 23 women who participated in the training activity; 8 from Aydın, 8 from Sinop and 7 from Çanakkale. The research data was obtained with qualitative methods and the interviews were conducted with the sample group by using the interview form developed by the researcher. Besides, observations and informal conversations were made in the training environment and the literature review was submitted in terms of the research topic. Negotiations were held in the related hotel and every debate lasted approximately half an hour. The data was analyzed by using the content analysis method. First, the data which was fit for the purpose of the research was coded, then descriptive analysis were made and it was subsequently interpreted by taking the research questions into consideration.

**Evaluation Findings:** As a result of the study, it has been found out that the participants experienced critical learning about gender mainstreaming and practiced to overcome the ideas which become obstacle for women's participation in politics. It was found out that the participants attended the training activities to get information, became conscious and raised awareness of those around. As for their expectations were mostly met, the participants remarked that the training activities provide courage, self reliance and motivation for women and contribute to raise awareness among women for political participation. They also suggested that the training should be more interactive, practical and eliminate the attitude of traditional teacher. Furthermore, the attendants indicated that the existence of male-dominated society, limitations put on women by private/ public sphere distinction, politics based on unearned income, social and economical areas overtaken by men and the idea that politics is a corrupted field bring forth the male domination in political life. Most of the participants also voted for quota application to be put into practice.

**Conclusion:** Women have always been the victim of discrimination in every field of social life because of their gender. They suffer from cliched gender roles in society and male-dominated mentality, and this situation generally puts women in the second place even if they participate in the public area and they aren't offered the equal opportunities in the same way as men. The long-term development objective of building awareness among women consists of transition process which provides women to recognize social and cultural gender stratification and be more dominant. Women encounter with the probable solutions to

deconstruct patriarchal values, gender roles and social relationships. In this aspect, these kind of trainings for female citizens carry the hope for fighting against practices which keeps women from political life. The findings obtained after this research show parallelism with the evaluation and assumption that are depicted in conceptual framework according to current situation. In this training, it's revealed that women have progressed in analyzing social gender roles and criticise practices which withhold them from political participation. Therefore, we can see the importance of such awareness raising trainings to indicate women's social – political - economical analysis, as in any other underestimated regions, and its reflection to their lives.

**Suggestions:** The private area responsibilities should be taken from women's shoulders in order to turn the society into their will and participate in decision making organs, notably in the political sphere. Hence, the local government should provide institutions like day care, patient care, etc. Positive discrimination must be allowed for women and quota application be legal as in most of the countries to overcome constitutional issues that prevent women's equal representation in parliament and local governments despite legal equality. The materials which can lead to gendered attitudes should be eliminated from educational institutions where social gender roles are recreated. Additionally, programmes should be prepared for illiterate women to embrace feminine consciousness and gain knowledge and skills about civil rights and social gender roles while learning how to read and write. Civil education ought to be given as part of the formal and informal education in order to provide participatory and democratical transformation of politics. Trainings and campaigns organized by state institutions and organizations on behalf of supporting women candidates should be promoted. Universities, local governments, non-governmental organizations and other shareholders should collaborate for women to take place in society, politics and parliament. They should follow women's movement in the world and take advantage of the leverage held by international organizations and finally education programmes and campaigns should be set out so as to raise awareness and empower women in general.

**KeyWords:** Women's Education, Political Education, Citizenship Education, Social Gender

## Condition of Public Primary Schools in Terms of Parental Social Support and Learning Needs of Parents

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**Purpose(s):** This research aims to determine the public primary schools' conditions in terms of parental social support and parents' learning needs regarding this subject in the Manavgat County of Antalya City.

**Method:** The universe of this model which was conducted through scanning model was consisted of 13928 parents who have children attending to the public primary schools in the Manavgat County. The data was collected from the sampling set that was consisted of 384 parents ((Balcı, 2001, 107). Questions regarding "Parental Social Support" were prepared by the researcher after investigating parental support and scales in the relevant literature (Aksoy, Kahraman and Kılıç, 1-14, 2008; Bokhorst, Sumterand, Westenberg, 417-425, 2010; Keith et. al, 1986; Maleckı, Demeray, 1-17, 2002; Larsen, Dehle, 2007; Yıldırım, 81-87, 1997). In interpretation of the collected data, frequency, percentage and chi-square methods were utilized.

**Findings:** According to the findings, It was determined that more than half of the parents of the children were in positive attitude regarding parental support for their children. However, it was also understood that there were some parents who cannot provide sufficient support which cannot be ignored in number and the parents that do not give any support to their children require learning needs about parental social support.

### Conclusions and suggestions:

It can be said that almost all of the parents provide assistance to their children in their homework. In spite of this, there is a group of parents who do not talk to their children regarding what is going on at school and who do not help their children in their homework, which indicate an important point in terms of social support because according to Büyükkaragöz (1990, 37), there is direct significant correlation between failure at school and lack of educational stimulation and less care of family at home. It is observed that there is strong impact of homework over success of students (Keith, 1986; Walberg, Paschal, Weinstein, 1985).

More than half of parents state that they watch TV with their children. In terms of social support, watching TV with children is a positive attitude of parents. On the other hand, watching TV with children for long times is negative in terms of social support because time spared for TV and parental participation are variables with direct or indirect impacts on students' success. Another divertible variable with flexible time is watching TV in leisure time and it is suspected that it could affect student success (Harnischfeger and Wiley, 1976). In a research synthesis of 23 researches regarding the correlation between TV time and level of success, it was found that there is an adverse relationship between success and TV time. It was suggested that TV time up to 10 hours per week provide a slight positive impact on success; however, longer TV time than this has increasing negative impact on student success (Williams, Haertel, Haertel & Walberg, 1982). Although other researchers consider 12 hour-

TV time as the most acceptable TV time, the research strictly emphasize existence of even small general negative impact on student success (Walberg, 1984). Timothy *et al.*, (1986) indicated that children from lower socio-economic layer and with less talent watch more TV compared to their peers from more advantageous economic layers and with more talent.

**Keywords:** Parental Support, Student Achievement , Adult Education, Parental Education, Primary Education

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# Investigating English Language and Literature Students' Lifelong Learning Dispositions in terms of Different Variables

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## Aim of the Study

This study aims to determine the lifelong learning dispositions of English Language and Literature students in terms of gender, grade levels, graduated high school, and age variables. Therefore, to fulfill the purpose of this study, the following research questions were addressed:

RQ1: What is the level of lifelong learning dispositions of English Language and Literature students?

RQ2: How do English Language and Literature students' lifelong learning dispositions differ in terms of gender, grade level, high school where they graduated from, and age variables?

## Method

Descriptive research design was used. The study group consisted of 402 English Language and Literature students studying at Cumhuriyet University in Sivas during the spring semester of 2014 - 2015 academic year. Of the students 29.6% (n=119) were from preparatory grade, 21.6% (n= 87) were from the 1st grade (freshman), 18.9% (n= 76) were from the 2nd grade (sophomore), 20.6% (n=83) were from the 3rd grade (junior), and 9.2 % (n=37 ) were from the 4th grade (senior). Research data were collected through "Lifelong Learning Tendency Scale" developed by Diker Coskun (2009). Data were analyzed using frequencies, percentages, arithmetic mean, standard deviation, independent sample t-test, one-way ANOVA and Tukey test.

## Findings and Conclusion

According to the scores of English Language and Literature students obtained from the overall scale, the least score was (63), the highest score was (145) the mean score was ( $\bar{X}$  =95.14). This result signifies that English Language and Literature students have high level of lifelong learning dispositions with respect to being upper value of the medium score of the scale (94,5). According to the findings obtained from the sub-dimensions of the scale, while the mean scores of the sub- dimensions motivation ( $\bar{X}$  30.28) and perseverance ( $\bar{X}$  =25.57) were higher than the medium score (21), the mean scores of lack of self-regulation ( $\bar{X}$  =15.29) and lack of curiosity ( $\bar{X}$  =23.99) were at lower levels than the medium scores calculated related to these sub-dimensions. High scores from the first two sub dimensions and low scores from the last two sub dimensions are expected to obtain from this scale as an indicator of high level of lifelong learning dispositions (Ayra & Kösterelioğlu, 2015). These results seem to indicate that students have sufficient motivation regarding learning desire and updating their current knowledge, with an effort and encouragement. In addition, they can not only improve their knowledge, experience and views but also take the responsibility of their learning. Furthermore, they can engage in behaviours inducing lifelong learning dispositions.

On the other hand, while no significant differences were observed in terms of gender and graduated high school variables, there were significant differences in terms of grade levels. Considering the overall scale, a significant difference was found between 1<sup>st</sup> and 2<sup>nd</sup> grades in favour of 1<sup>st</sup> grade ( $\bar{X}=96.48$ ) ; 1<sup>st</sup> and 4<sup>th</sup> grades in favour of 4<sup>th</sup> grade ( $\bar{X}=98.14$ ) concerning their lifelong learning dispositions [ $F(4- 401)= 3.047$ ;  $p<0,05$ ]. While students in the 4th grade have the highest lifelong learning dispositions, students in 2<sup>nd</sup> grade have the lowest ones.

As for age variable, the results showed that students at the age range of 23 and 25 exhibited the highest lifelong learning dispositions while students at the age range of 17-19 showed the lowest ones. In the light of these findings, it is likely to say that lifelong learning dispositions were strongly related to increasing age.

### **Discussion**

The findings obtained within the scope of the present study revealed that English Language and Literature students had high level of lifelong learning dispositions. Overall, the obtained data are parallel to the results of other researches in relevant literature (Demirel & Akkoyunlu, 2010; Oral & Yazar, 2015). According to the results of the study conducted by Evin Gencil (2013), although perception level of prospective teachers' lifelong learning competences was sufficient, English Language Teaching and German Language Teaching students' lifelong learning competencies were at high levels. In contrast to the findings of the present study, Diker Coskun (2009) indicated that lifelong learning dispositions of university students were lower than the medium score of the scale which was used in this study as well.

In conclusion, the results of this study indicate that knowing a foreign language, especially English as a lingua franca, has positive effect on lifelong learning dispositions. Therefore, the results of this study can provide more support for considering the effect of knowing a foreign language on lifelong learning dispositions. In particular, the findings can also provide some clarification of the connections between lifelong learning desire and foreign language education. Therefore, participation of students who study foreign languages in exchange programs like Erasmus be increased in order to enable them to take part in learning experiences and to develop lifelong learning opportunities as well.

**Keywords:** Lifelong learning, disposition, English Language and Literature

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# Effects of Students' Adult Training Activities on Their Emotional Intelligence and Academic Motivation

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**Purpose:** The particularly important points in developing adult training activities are the improvement of individuals' learning motivation and the provision of accessible educational services for all people (Malkoç,1996). Hence, the main of this study was defined as to describe the effect of the educational activities provided to women on their emotional intelligence and academic motivation levels. According to Goleman (2000) emotionally intelligent students have various competences that improve their potentials to be successful. These competences cover self-motivation, drive-postponement, and improvement of optimistic view. The supportive interactions outer families have important positive effects on students' academic success, social relations, personal objectives, and career expectations (Hromek, 2007).

**Method:** The study group of this semi-experimental research consisted of university students in fall semester of 2012-2013 academic year. Totally 64 students participated in the study. Students' emotional intelligence and academic motivation levels were measured before the training activities. Same tests were applied to them after 15 days of the completion training. The differences between two measurements were statistically evaluated. Parametric tests were used in testing the data which were collected using a questionnaire that consisted of three forms: "Personal Information Form", "Emotional Intelligence Evaluation Scale" and "Academic Motivation Scale". The Personal Information Form consisted of 8 items about issues that may affect students' emotional intelligence and academic motivation. The "Emotional Intelligence Evaluation Scale", developed by Hall (1999) and tested by Ergin (2000) for its validity and reliability, was used to measure the students' emotional intelligence. The Cronbach's Alpha reliability co-efficient was found .84. Increasing scores indicate higher emotional intelligences (Ergin, 2000). The third form, "Academic Motivation Scale" is a Likert type tool that consists 28 items and was developed by Ünal Karagüven (2012). The total-item correlation coefficient of the scale changes from.22 to .64. The Cronbach's Alpha reliability coefficient of the scale was found to be .87.

**Findings:** The academic mean of 64 female students is  $2,72 \pm 0,38$ . Students' emotional intelligence levels were found to be higher among the students whose parents have high school or higher educational levels ( $p < .05$ ). The external motivation levels the students who stated their belief in usefulness of having trainings before starting to train the people was found higher than of the other students ( $p < .05$ ). While the students' emotional intelligence mean point was  $134,95 \pm 18,22$  before the training activities, it increased to  $144,55 \pm 20,01$  after the training ( $p < .05$ ). Statistically significant increases were observed in the sub-dimensions of the scale such as awareness of feelings, self-direction of emotions, self-motivation, empathy, and controlling the relations ( $p < .05$ ). While a decrease was observed in the 'lack of

motivation' sub-dimension of the academic motivation scale, an increase occurred in the sub-dimensions such as internal motivation and external motivation ( $p<.05$ ).

**Conclusions and Suggestions:** Adult training activities are not only a necessity but also a fundamental structure for all contemporary communities which aim to develop continuously. These activities have many benefits for students beside their social contributions. The students participating in such activities are not only be able to develop their social skills, and to improve their inter-disciplinary coordination competences but also to produce solutions for the problems described in their off-campus social life. They can develop their sense of belonging to both university and community. At the same time they can contribute to the development of their personal potential. In our study, also, an increase was observed in students' emotional intelligence and academic motivation levels. Furthermore, the students reported that they were very happy during and after the trainings, and also that were eager to participate effectively in such activities in their subsequent life. In implementation of adult training programs, it is important to follow the adult training principles, to consider the growth and learning characteristics of adults, to remember the main of social and individual development, to behave in a manner of trainers' responsibility. Also, adult training activities must be carried out in the frame of life-long learning approach. The students who are to complete their university life, and to start their professional life are in need of having a good emotional intelligence level beside the other competences in order to overcome the problems, and to get along with the people in workplaces. The organization of activities towards the perception of the importance of emotional intelligence, as well as towards the improvement of students' emotional intelligence competencies will surely be helpful in supporting the adult education programs. In some studies, it was reported that the improvement of students' emotional intelligence levels through emotional intelligence trainings is possible (Jaeger, 2003; Ulutaş and Ömeroğlu, 2007). Such trainings can also be successful in compensating the lacks in students' emotional competencies. Moreover, adult training programs can be organized in the universities to develop and to support students' social responsibility and awareness, effective communication skills, self-esteem, and so on.

**Keywords:** Academic motivation, adult education, emotional intelligence

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# **A Proposal of Poetic Approach in Adult Education**

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## **Purpose**

The purpose of this paper is to draw attention to the importance of new methods and teaching materials in order to arouse interest for learning and increase the efficiency of educational applications in adult education which exhibits an increasing requirement of personal development focused learning activities and teaching facilities. In this context, it has been discussed that the poetry which were the featured one among artistic and literal materials used in educational implementations since ancient times, might be beneficial in adult education.

## **Method**

Mainly, literature review techniques have been used for this paper. For that purpose, both national and international essays and papers were utilized. Additionally, as a practise implementation of a research in near future, there were seminars conducted as training for trainers in Public Education Centre of Erdemli in Mersin. In the program of 10 hours of seminars, the participants who were consisted of 66 qualified instructors were asked for reading and writing poems related to the main topics which were discussed during the lectures. Some of the poems which had been versified by participants were presented in this paper.

## **Findings**

Poetry is the raw emotion of inner truth that expressed through a language within a culture. It is also a unique medium for emotional expressions (Hunter, 2002: 141). For that reason, there is a distinctive place for poetry in literal arts and studies. Because of the literal education's positive influences over the human character such as elevating it toward the good and the elegance, the literal works gain an important role among such sources. Hence, the education and literature are interrelated and may complement each other naturally (Akkaya, 2010: 89).

The role of literature in education is related with cognitive and affective components of educational processes. Whereas the action of learning itself is occurred through interconnections of cognitive and affective experiences of learners, the educational processes are mainly based on cognitive aspect. Thus, the problems based on this issue, such as inefficacy in directing the students towards good behaviours and failure in complicated decision making processes, arise from traditional cognition focused educational facilities. (Özemer, 2007: 78-79). Since ancient ages art, sports and literal works had been regarded as basic items for educational activities and utilized as teaching materials. Particularly, it has been determined that Confucius and Socrates who played role of initiators in philosophy and education attached great importance to literature and poetry (Komşu, 2011: 42-49). Also in Anatolian traditional popular culture, the poetry has a unique place in literal and musical works. In such poems, in addition to religious education, both individual and social developmental issues are also treated (Akkaya, 2010: 99).

It has been observed that the poetry as a teaching method and course subject, took part in educational programs of western countries in recent years. In this respect, Cahnmann's arguments must be mentioned essentially in educational researches. Cahnmann (2003: 31-32) claims that talent of versification, sense of rythm in verses, structure of poems, the power of evocation of poetic words, succession in dramatical description of issues are all considerable values which might be utilized through poetry in educational studies and regulations. Some of the studies on investigation of the relation between poetry, visual arts and emotional intelligence denoted that both poetry and visual arts may affect students' emotional intelligence positively (Morris et al., 2005: 890-899).

Similarly, some of the studies on outcomes of poetry implementation in medical education determined that it can be so useful in improving of relations between patient, patient's relatives and medical personnel. In the process of development of personal and professional efficiency, the personnel's (in medical services) abilities of empathetic thinking and interpretation requires emotional talents and thus such factors' role are significant for developing the doctors' empathetic requirements (Foster and Freeman, 2008: 294-295).

As a result of disscussions above, emphasizing the need for sustainable, emotional intelligence based and improvement provoking new education philosophy indicates an urgent agenda. Thus, the structure of poetic world and benefits of melodical and versified expressions are expected to be beneficial in adult educational studies. Mainly the four pillars (learning to live together, to know, to be and to do) which were suggested in adult educational works in UNESCO's report of Delors (Delors, 1996: 22-24) requires literal and poetic materials and methods inevitably. Consequently, in Erdemli case, we could argue that, the results corresponds to the former results and disscussions mentioned above.

### **Conclusion and Suggestions**

The literature and poetry itself have a distinctive importance due to their emotional and spiritual functions in mankind's historical background and social life. However, it may be argued that such an importance and functionality were underutilized in educational activities. In order to raise a society which consists of adults who can learn to live together, to be himself, to do and to know his needs and qualities properly, poetry might be an irreplaceable method. As in western countries, there is a promising poetic future in Turkish adult education system. Therefore, we should develop a national poetic model in order to implement in all of public education centres.

**Keywords:** Adult education, literature, poetry, teaching philosophy.

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# **Lifelong Learning in Turkey: Market-based and Neoconservative**

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Understanding the dimensions of the transformation of adult education into lifelong learning for about the last 30 years can help to understand the whole change in the education system in Turkey. As a matter of fact lifelong learning implies the unlimited process of learning in terms of age, time and space combining the basic education and adult education and the extensification of the other learning settings (Sayılan, 2001). The concept underlines the need for the transformation of the education systems according to the increasing importance of adult education in a rapid changing world. However, lifelong learning policies in Turkey seem to be a factor of the neoliberal change (Bağcı,2010). The global neoliberal policies have two dimensions in general: Marketisation and neoconservatism.

Neoliberalism is the alliance of liberalism that implies the maximisation the individual's interest and conservatism that depends on the politics of tradition against all kinds of rapid change (Topal, 2013: 424). In Turkey, after 1980's, these two concepts have been the main determinants of the change in education. Through these years, lifelong learning has been one of the leading concepts of the neoliberal change in the education system in Turkey. The National Law of Basic Education in Turkey divides the education system into two parts: Formal and non-formal (MEB, 2014). Although this law which was put into force in 1973 includes some conceptions of lifelong learning, the fact is that the entrance of lifelong learning into the education system in Turkey as a regulatory concept is about the process of the membership of Turkey to the European Union (Bağcı, 2011: 153). The process of adaptation to the European Union is the milestone of lifelong learning policies in Turkey. This study aims to evaluate the meaning of lifelong learning in Turkey as a concept of leading the neoliberal transformation in education. To that end, lifelong learning policies are examined under two subtitles that are the marketisation and the conservatisation of education in Turkey.

## **Method**

This study holds a descriptive survey model that evaluates the official lifelong learning policy papers, the statistical data on the public expenditures, the number of students and adult education activities and on the other materials used in this field in Turkey.

## **Findings**

The important point of the neoliberal transformation over lifelong learning is that the marketization and the conservatisation processes are closely tied to each other to an extent that they cannot be conducted without each other. Lifelong learning policies in Turkey seem to be strictly based on the Post-Fordist flexible production system in Turkey. All that the official authorities expect lifelong learning is to meet the requirements of the labor markets but nothing for any other social matters. New vocationalism has been the main approach to shape the lifelong learning policies. Public expenditures have been decreasing while the demand to participate in lifelong learning activities increases. From a different standpoint, lifelong learning policies seem to help the conservatisation of the society as a whole. Neoconservative policies in the fields such as religion, family and morality have become the main references in lifelong learning activities. Neoconservatism stands against all the possibilities of critical thinking replacing them by religious thoughts. The increasing references to the Ottoman Empire in the field of lifelong learning is another aspect of the

neoconservative agenda. Else, the increasing rate of the conservative organisations penetrating into the activities of lifelong learning and the expanding surveillance on the education systems are the results of conservatisation.

## **Results**

The neoliberal lifelong learning works for the reproduction of social inequalities and else for the prevention of the objections providing the social consent. While the neoliberal conception reduces lifelong learning to an input of the production system, the neoconservative content helps to invalidate critical thinking. The alliance of liberalism and conservatism under neoliberalism calls for everyone to work harder and just to consent thanks to lifelong learning.

**Keywords:** Lifelong learning, market-based, neoconservative, neoliberalism

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## Seasonal Workers and Education

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Seasonal agricultural workers that is one of the important fields of agricultural sector are one of the most problematic and derelict sections of Turkish working life with its education problems, negations in housing conditions and difficulties in working conditions. Seasonal agricultural workers families provide for the family by working together with the mother, father and sometimes children. Families, who do not have any or have too little arable land to provide a living for families, have to work as Seasonal agricultural workers. The objective of this research is to determine how seasonal agricultural laborers' children at primary education period are influenced due to working conditions in terms of access to education, attendance to school, health and development rights and to present solution recommendations to restore their living conditions. The research was designed as qualitative and a phenomenological pattern was used in research. Under research interviews were performed with a total of 266 people as 28 school managers and 88 teachers chosen by way of purposive sampling method in 11 schools from Şanlıurfa and Diyarbakır provinces and Siverek subprovince of Şanlıurfa, and Çınar subprovince of Diyarbakır and 150 seasonal agricultural laborers from the foregoing provinces leaving for Ordu province to harvest hazelnut . It aims to suggest solutions to determine how the children of families attending seasonal agricultural work at the age of primary education are affected due to the working conditions and in terms of determining how they are affected in relation to reaching the education, continuing attendance, and rights of development and to suggest solutions aimed to achieve the improvement of living conditions.

1. What are the working conditions and periods of STAW families?
2. What are the difficulties experienced in education by children from STAW families?
3. What are the levels of school discontinuation of children from STAW families?
4. What are the measures taken to deal with the student discontinuation?
5. What recommendations can be made in relation to solving the educational problems of children from STAW families?

The data collected were analyzed with the descriptive analysis technique and the content analysis technique. In the research the difficulties of children they experience in education from the families of seasonal agricultural laborers (SAL) are discussed. According to the results obtained from research the seasonal agricultural labor starts in March and ends in November. The participation of all members of families working as SAL in this labor causes their children at compulsory education periods as members of the families to be away from schools. It was stated that this situation caused the children of SAL families to be deprived of education and thereof victimized. As a result, the families working as seasonal agricultural laborers work in months when the need of labor force becomes intense in agricultural sector. Part of these months overlaps with the months when the school education is intensified. In such a case the families need to make a preference between whether to send their children to school or to make them work as SAL. This preference is made as to make them work as SAL due to poverty and desperation.

**Keywords:** Agricultural workers, child labor, right to education

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**THEME 19:**  
**Perspectives on Lifelong Learning**

# Education in Hobbes's Political Theory and its Effects on Locke And Rousseau

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**Purpose:** Resolve the place of education in Hobbes's political theory and its effects on Locke and Rousseau

**Method:**By literature review the basic political books of Hobbes, Locke and Rousseau will be read and the ideas about education will be deconstructed. The relations between the ideas will be examined.

According to Hobbes, people are born equal. Moreover people are mentally more equal. Insecurity arises from this equation. The equality of the hope of reaching to objectives arouses from the equality of abilities. When two people at the same time desire to achieve the same things they become enemies. War arises from this insecurity. Competition, diffidence, glory are three causes of quarrel in human nature. Everyone is in the state of war unless there exists a state with an intimidating force. People's emotions that lead to peace are fear of death, desire to obtain the necessary things for comfortable life and hope to get them by working. Appropriate terms of peace which is reasonable and people can agree on is called the law of nature (*lex naturalis*). Contract is transferring of mutual rights. Rights cannot be transferred (to be hurt, to be chained to the prison) are the right to resist attacking to get one's own life. Failure to fulfill the covenant is injustice, everything which is not unjust is just (Hobbes, 2013/1651).

Hobbes identifies freedom or liberty as the absence of opposition (by external impediments of motion). This definition can be classified as negative freedom. The liberty of a subject is only in those things which in regulating their actions the sovereign has pretermitted. At this point, we can say that parents are free to educate their children (Hobbes, 2013/1651).

The sovereign decides the ideas which will be thought to artificial man. According to Hobbes thoughts are the source of action. In order to manage the actions Sovereign should decide; which ideas are contrary to the peace and which would be appropriate to peace, whom will speak to the community and to which community, who would control the written books. At this point it can be said that in order to control the actions thoughts must be controlled. This can be concluded as a sense of censorship (Hobbes, 2013/1651).

Hobbes says that responsibility of education is given to public officials by the Sovereign. Sovereign gets the right from God. Then Pope is dismissed from being mediator between sovereign and God. Education should not be a monopoly of the church. The authority of assignment of teachers and a kind of censorship board belongs to the sovereign. This authorization is not transferable. This means church's authority is neglected in assignment of teachers and censorship board. These ideas may make Hobbes as the first time thinking of a need of secular education in a government. Education can be also seen as a positive factor in ensuring security (Hobbes, 2013/1651).

All people are by nature provided of notable multiplying glasses (that is their passions and self-love) through which every little pain appeared a great grievance but are destitute of those prospective glasses (namely moral and civil science) to see afar off the miseries that hang over them and cannot without such payments be avoided. Education will help to gain these prospective glasses (Hobbes, 2013/1651).

According to Hobbes education of the public, completely depends on educating the youth in the universities correctly. Young people must go to the educated universities and then educate the public. Education's being seen as a power to make the contrasts live in peace shows the importance of realization of Hobbes first law of nature "search for peace".

### **Conclusion**

Hobbes' political system has a fundamental effect on Locke and Rousseau. Hobbes' political system which is contractual with a ruling monarch or parliament has evolved into an understanding that leads to further expand in liberty and property and a separation of legislative and executive in Locke. In Locke's view political society existed for the sake of protecting "property", which he defined as a person's "life, liberty, and estate (Locke, 1988/1689). In Rousseau, political society is tried to become a whole and constructing its general will seems to take the place of the sovereign in Hobbes political system.

Education has important functions in all three political systems. Hobbes sees education as a sovereignty issue and takes back the responsibility of the church and its monopoly on education and gives this authority to sovereign and its public officials. In a sense this is constructing a secular education. In addition, to ensure the legitimacy of the ruling, telling the sovereign rights and the rule of law to the public are given as the task of public education. Locke gives the responsibility of education to the family. This is a duty of the political system at the same time. Hobbes also gave the families the liberty to educate their children. We can say that Locke expands this idea of Hobbes. According to Locke; families, as an example of a small community should provide the needs of the child and accustom the child to both the rules and the law in her political domination and authority with the responsibilities to society.

In Rousseau, education has an important role in the formation of political whole, the formation of social man and the settlement of social religion. (Rousseau, 2009/1762) Indeed, Rousseau's political system stands at a point where politics and education gets together as in Plato's "Republic". Rousseau's society is an ideal community or society intended. And main power in this constructing process is education.

**Keywords:** education, political theory, state, liberty, sovereign

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# Constructing Values for the Trans-Human and the Trans-Humanist Agenda

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In the last two decades of intellectual period we saw a new addition to the never-ending shell changings of the social sciences and humanities. Invert-looking, pessimistic, and gloomy theoretical attempts of the 20<sup>th</sup> century started to be replaced by a positive, optimistic and, cheering inter-discipliner cooperation. In John Brockman's (2011) definitions, as the *Third Culture* or as the *New Humanists*, we started to adopt the intellectual outcomes of this process. It is for sure the new situation that science and technology drifts us and their recalibration of human are certainly important for the establishment of the trans-humanist agenda. This change shows that Nietzsche's characterization of *ÜberMensch* (OverHuman) is started to be fleshed out. Early modern philosophers such as Descartes and Hume centralize the constancy and stableness of mind's borders and qualities to explain the relation between human and environment according to their own philosophical inquiries and conceptualize this changelessness of the mind as a zero point. New Humanists are basically against this static envisagement of human.

If human is a definition conceptualized by this tradition, then in a wider framework, human is also the "citizen, right holder, property owner, etc." (Braidotti, 2014, p. 11) In this case, trans-human carries the eagerness of deconstructing this conception of human. The first attempt to maintain this eagerness is not of course trans-humanism. All the issues of post-modernism somehow depend on this characterization of what is human. Habermas (2003) discusses that post-human comes along with both enthusiasm and apprehension. I think the enthusiasm is the following: Deconstruction of human brings about not only the mere destruction of its masculine, racist, and imperialist content but also a complete destruction of the static, changeless, and archaic nature of the mind and body which, at the end, results in an ultimate anti-anthropocentrism. As I am not going to evaluate trans-humanism per se, I will leave various issues concerning trans-humanism open.

In this presentation it is targeted to indicate the philosophical foundations of constructing values in a trans-humanist frame. When the accounts of values in humanist and post-humanist traditions are evaluated, it can be seen that for the trans-humanist future, there is a need of a Gestalt-switch. As Verbeek (2011) indicates that, first, there is a need of a post-anthropological transformation of the connection between human and not-human. Of course, this is needed only for the preparation of the actual and present human to become a trans-human. In this sense, this seemingly very humanist suggestion of Verbeek can be used with a trans-humanist intention. So, for the construction of values, the first thing to do is not a total destruction of present values but the transformation of values posited by the actual being, who faces the process of becoming a trans-human.

Trans-human is a technological being. Analogically, in the modern period what distinguish human and animal were language and thought; and then what distinguishes human and trans-human is technology. Admitting that humans possess technology this can be nothing more than baby-steps. Even if possible future features such as agamogenesis, non-aging, cyber-life,

silicon-body, and consciousness-transplant are all extremely difficult cases that we may imagine today, they consist of quite possible future scenarios for the trans-human. As it was pretty difficult for the moderns to accept positioning humans and animals equally due to animal's communicative and cooperative abilities, it must be also extremely difficult to conceptualize human and trans-human as the same thing just because humans have an achievement in technology today. Therefore, we must say that human is a being, which proceeds in becoming trans-human.

By means of these reasons, human must be evaluated as a technological material and not a normative contract. In order to obtain this adjustment, the first thing to do is to rearrange the anthropocentric education and teachings of ethics. If the subjective and objective features of morality are thought of, it can be seen that this distinction is made by natural and artificial. Pain/pleasure, interest, free-action and similar other features are all constituting the natural and subjective part of morality. Duty, law, justice, equality, fairness, etc. are the examples of the artificial and objective part of it. Unfortunately, it will be impossible to evaluate the system of values of the trans-human according to these features. All these natural and artificial features can be applicable when we restrict the being in terms of the above characterization of human. Norms can be identified, transformed and varied only for the being with a static body and mind if and only if it interacts with its environment. The equation can be solved, when there is only one variable. However, trans-human's dynamic nature is not appropriate for this equation and this will last as long as the environment-human dichotomy becomes a unity. The reason of this is that all these natural features of the anthropocentric morality depend on the presuppositions such as, a certain type of body, gender distinctions, mortality, and etc. Trans-human with the ability of agamogenesis cannot be analyzed by the definitions of gender because a thought whose dialectic disappears loses also its dialog. Therefore, a trans-human agenda requires new presuppositions based on the possible future trans-human characterizations.

In conclusion, as a technological being trans-human is no more a human and therefore requires a total construction of values. The trans-human, who crawls in actuality, must construct its values starting from today and in fact, it must designate its direction just like facing a Lamarckian evolution. Humanist and post-humanist moralities cannot serve for this end. Thus, the frame of values of the trans-humanist agenda necessarily calls for a philosophical inquiry. The methodological aspects and the *whatness* of the trans-human will be issued in this presentation.

**Keywords:** Trans-humanism, Education of Values, Future-Ethics.

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# A Phenomenological Study on Absent Middle School Students

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The international exams (PISA, 2012) indicate that absenteeism in Turkey is above average (Yıldırım, Yıldırım, Ceylan, & Yetişir, 2013). The reasons for absenteeism have been investigated. Firstly, research indicates that student characteristics based on their families affect their school attendance and academic achievement (Eastman, 1998; Özbaş, 2010). The other reasons for absenteeism may be shown as student him/herself, school, and friends (Özbaş, 2010). Absenteeism can also emerge from natural conditions (Romieu et al., 1992). When these reasons for absenteeism are taken into consideration, it can be said that there is a relation between absenteeism and students' daily lives. Thus, the purpose of this study is to explore absentees' school-related experiences in light of their daily lives.

## Method

### *Research Pattern*

The current study employed phenomenology that is a qualitative research method. Phenomenology attempts to identify common patterns between how people perceive similar experiences and how they interpret them (Fraenkel & Wallen, 2006). These common patterns can be referred to as the essence of experiences. Research data is collected through document analysis, interview and observation. Document analysis was utilized to identify the absentees and to collect data about them. Qualitative interviews were conducted to identify the school-related experiences of absent students in middle schools. The face-to-face, voluntary interviews were conducted, which lasted for nearly 45 minutes. Observations were conducted so that the interview findings could be confirmed by the researchers.

### *Validity and Reliability Studies*

Triangulation toward credibility was performed through expert analysis and member check. To obtain triangulation, document analysis, individual interviews, and observations were performed. For member check, the students were asked to read and confirm the findings obtained from the interviews with them. Additionally, expert opinions were obtained within the coding and analysis process.

With respect to transferability, thick description and purposive sampling methods were used. The research was analyzed by a third party for research consistency. With this aim, a third party specialized in qualitative research was presented with raw data, data collection tools, and details of all analysis and reporting phases for further examination.

### *Data Collection Tools*

An interview form was developed. To select appropriate questions, a literature review was performed and a question pool was formed. An expert reviewed the interview form and data

correction was made accordingly. To determine the clearness and understandability of the questions, a pilot study was conducted with a similar working group.

### ***Participants***

After obtaining official permission, 14 8<sup>th</sup> grade students who were absent for more than 25 days within a single semester were interviewed using the criteria sampling method.

### ***Data Analysis***

The interviews were analyzed using the phenomenological analysis. In the first coding cycle open coding was used. The second cycle involved axis coding. The third cycle determined the explanatory themes, and the final cycle formed the “essence” which reflected the common experiences of different absentees.

### ***Findings***

The first finding of this study was that students were absent to classes rather than school. Students come to school; however, they do not enter the class. Students were absent together with their peers as a group. In other words, students were absent collectively, in terms of sharing the risks.

Students shared the same opinion about their dislikes towards certain teachers and courses, which led to absenteeism. Teachers did not perceive ensuring student attendance as a public responsibility and they caused students to stay away from the classroom in order to maintain their positions. Administrators forced the students to the classroom within the scope of their responsibilities. In other words, teachers and administrators attempted to pass off the responsibility to one another. The students did not stay away from school; however, they created a private space for themselves in the school cafeteria.

In this private space, students developed survival strategies. While female students normally acted in a feminine way, they developed masculine behaviors in this private space. Female students fight with male students or used bad language towards male students. Absent female and male students perceived hardworking students as feminine and the feminine behaviors of hardworking students conflicted with the masculine behaviors displayed by absent students in the private space.

Survival strategies are perceived as unruliness by the administrators and teachers. This is a cause of these students' placement in disadvantaged student groups. Furthermore, improper behaviors, for which students are removed from the classroom, are coping mechanisms for boredom. When they display such behaviors, students are sent to the areas that are under the responsibility of the administrators, and instead students went to their private spaces. In other words, the private spaces created by students gain a public nature. There is an interaction between the strategies developed by students against boredom, their survival strategies, and their creation of a private space at school.

Furthermore, the fact that schools created greater opportunities through sports facilities from which male students primarily benefit has led to an increase in female students' being disadvantaged. Absent students are pleased when they are in the spaces they survived because the private spaces in schools are the only places they socialize.

## **Conclusion**

This study determined through phenomenological research the common essences in the experiences of different absent students who committed absenteeism collectively.. The common private space created by students, as a result of the attitudes of teachers and administrators, was the school cafeteria. In this private space, the survival strategy displayed masculine and improper behaviors. Furthermore, coping mechanisms for boredom were also perceived as unruliness. Therefore, the survival strategies and coping mechanisms for boredom within the private spaces created a cycle that caused students to remain in their private spaces. Additionally, the fact that the opportunities created in schools were more male-oriented led to female students becoming more disadvantaged.

## **Recommendations**

In international exams, class absenteeism in addition to school absenteeism should be analyzed.

Class absenteeism and school absenteeism should be differentiated from each other when examining absent students.

**Keywords:** Absenteeism, Phenomenology, Middle School

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# Reflections of Soviet Union Education Philosophy on Azerbaijan Education Practices

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The purpose of this study is to explore how Soviet Union education philosophy affects Azerbaijan education practices. Soviet education philosophy is the idea pioneering modernization of Azerbaijan education. Before Soviet there is formal education in Azerbaijan. Azerbaijan founded as an independent republic in 28 May 1918 and entered to Soviet Union only 23 month later (Bishku, 2011). In that time interval modern school were found but could not be sustained. That is Soviet Union could reach education all regions of Soviet Union countries. Soviet education can be summarized by these words “upbringing or rearing” and “formal education”. All education system focused on to up bring “new Soviet man”, who takes shape with Marxist-Leninist ethics and morals (Delbert, 1984). That philosophy had been very forceful and so can be felt in all village, towns and cities of Soviet Union countries. In order to live Soviet government’s that policy is not wrong. After the 1991, 15 different independent countries have faced such an issue that they have to found new education philosophy. This education philosophy has to serve to independent Azerbaijan Republic’s goals. Nowadays Azerbaijan education scientists and education policy makers look for new, modern, original and independent education philosophy and system. Because of that, they need to know close history of Azerbaijan and effects of ideologies on Azerbaijan education practices. Azerbaijan’s Soviet experience is rich, so there are many useful instances in order to reform Azerbaijan education system. This study gives idea about effects of Soviet education philosophy on Azerbaijan education practices.

In order to do that study qualitative research model is used. In that research document analyze, observations and interviews are data collection methods. Pressed materials, such as articles, books, reports and pictures about Soviet Union education philosophy and it’s reflections on Azerbaijan education practices are our data origins. In school visits by using observation forms notes was taken and are compared with other school buildings in other countries of Soviet Union. Moreover some movies about Soviet education in Azerbaijan are watched and took notes.

In addition, interviews with experienced pedagogues are another data collection method. Participants of interview have rich pedagogy experience in Soviet Union. They have rich experience about Soviet education system and Soviet schools. One of them is educational science professor, and one of them has philosophy doctorate in philosophy branch. There is one teacher, one ex director and one ex inspector. Some of them are instructor in education faculty now. Rests of participants are ex teachers and teacher administrators in schools. By using semi-structured interview form deep information has been obtained about effects of Soviet education philosophy on Azerbaijan education practices. Research is made by analyzing interview texts.

Participants of interview are experienced inspectors and administrators of old Soviet education system. Data collection tool is only interview form and that form is semi-structured. By such form many different questions can be asked during interview in order to obtain deep

information. Mainly in that research document analyze and text on analyze of interview texts was held.

Findings of that study can be grouped under the four titles. Reflections of Soviet Union education philosophy on education practices grouped as: schools' physical structures, schools' administration style, content of textbooks, in classroom education style. In general, founder communists of Soviet Union shaped all education system in Azerbaijan to their ideological ends. In school famous "the Soviet man's" pictures and aphorisms can be seen. Student societies and clubs focused to communist slogans. Schools' directors were chosen from most dominant and famous communists. Administration style was strictly centered and there was strict control on directors of schools. Contents of textbooks are rich with Lenin aphorisms and poets about Lenin. Lenin's life style was explained to students as a sample narrative. In classroom, teacher represents founders of Soviet Union. Teachers were high motivated and all lectures were tools of giving Soviet ideology to students.

As a result of this research I can say that reflections of Soviet Union education philosophy on Azerbaijan education practices are much. Some of these reflections are applicable and useful when viewed to old from current time. Some of these reflections are seen well and some are bad in current time. But this is fact that Soviet Union education philosophy was very active and strong that it spread all Soviet countries. Thanks to that philosophy public education became widespread in all Soviet regions. In Azerbaijan achieved independence in 1991 and Azerbaijan education authors is trying to found new education philosophy. In order to found new, original education philosophy Soviet experiences and before Soviet Union Azerbaijan ethnic groups experiences should be used. Moreover in founding education philosophy religion, tradition and historical and geographical thinking should be taken into account.

**Keywords:** Soviet Union education philosophy, Soviet schools, Azerbaijan education system

## Joint Session Presentations

### What Does It Mean to be a Student in Different Types of High Schools?

- Presentation Title:** Minding the Gap between School and Academy  
**Moderator and Presenter:** Ass. Prof. Dr. Mustafa Sever (Ankara University Faculty of Educational Sciences, sever@education.ankara.edu.tr)
- Presentation Title:** Being a Student in Anatolian Imam and Preacher High School  
**Presenters:** Müge Olğun (Gazi University Faculty of Education, mugeolgun0@gmail.com); Zekeriya Çam (Ankara University Faculty of Educational Sciences, zekeriycam@gmail.com)
- Presentation Title:** Being a Student in Fine Arts High School  
**Presenters:** Burcu Çıldır (Ankara University Faculty of Educational Sciences, burcucildir@gmail.com); Nergiz Üçüncü (Ankara University Faculty of Educational Sciences, nergizucuncu@gmail.com)
- Presentation Title:** Being a Student in Anatolian High School  
**Presenters:** Tuğra Karademir (Ankara University Faculty of Educational Sciences, tugra1986@gmail.com); Özgür Ulubey (Ankara University Faculty of Educational Sciences, ozgurulubey@gmail.com)
- Presentation Title:** Being a Student in Vocational High School  
**Presenter:** İnci Öztürk (Ankara University Faculty of Educational Sciences, ozinci13@gmail.com)
- Presentation Title:** Being a Student in Social Sciences High School  
**Presenters:** A. Fulya Soğuksu (Ankara University Faculty of Educational Sciences, afulyasahin@gmail.com); Yonca Koçmar (Ankara University Faculty of Educational Sciences, yoncakocmar@gmail.com)
- Presentation Title:** Being a Student in Science High School  
**Presenters:** Ayşe Gülsüm Akçatepe (Ankara University Faculty of Educational Sciences, a.g.akcatepe@gmail.com); Ersin Türe (Ankara University Faculty of Educational Sciences, ersinture@gmail.com)

### Purpose

Our joint panel proposal will cover the findings of a research project that was planned and conducted during a doctoral seminar. The study sets out to explore what it means to be a high school student in different educational settings, particularly in terms of school type. Towards this end, it probes the ways in which meaning of being a student is constructed in relation to social and cultural phenomena surrounding both schools and students' life-word experiences. As the study adopted phenomenological approach, it sought to understand what underscores the meanings derived from the experiences, instead of describing or identifying them. Working across various school types, the study also aims to capture in-school factors, be it discursive or actual, modifying the meaning of experience.

### Method

This study adopted a phenomenological approach (Patton, 1990) with an effort to explore what it means to be a student in different types of high schools through the eyes of students. The types of high schools and the high schools where the research was conducted were selected through maximum variation sampling (Franken & Wallen, 2006). Accordingly, the research was conducted in thirteen high schools selected from six different school types (Science High School, Anatolian High School, Vocational and Technical Anatolian High School, High School of Fine Arts, High School of Social Sciences, Anatolian Imam and Preacher High School) and located in the central districts of Ankara. The participants of the research are composed of 96 eleventh graders (eight girls and eight boys for each school type)

that volunteered to take part in the research. The research data were constructed using semi-structured and face-to-face qualitative interviews (Mason, 2002). A semi-structured interview form was developed in full collaboration of the project team and a pilot interview was conducted with an eleventh grader attending an Anatolian high school and analysed jointly by the project team in order to ensure that the data collection is trustworthy. After the necessary permissions were taken from the Ministry of National Education and the Ankara University Ethics Committee, the interviews were conducted by two researchers in each school type. The interviews were tape-recorded with the permission of the participants and the recordings were transcribed by professional transcribers. The research data were analysed through phenomenological coding in two coding cycles.

### **Conclusions and Suggestions**

Every school type deserves a special attention when it comes to elaborate meanings attached to being a student in each of them. Thus, presenters of each school type will share their findings in detail during their presentations. However, as an overarching finding of this study emerged from constant comparison of data conducted from different school types is that there exists a tendency among students aligning themselves with social, cultural and political symbols anchored deeply into their life-world experiences, albeit, in most cases obliviously. This translates into what school means for them vis-à-vis what they mean for school. Schools discursively communicates with students particularly through expectations from students, sending symbolic messages who the students are and who they would become, by revealing outcomes of graduating from that school. For example, students from social sciences high school are very ambitious and decisive (to the point of almost being sure) about being an influential person (politician, bureaucrat etc.) in society, while students of vocational high schools do not seem to sketched out their future career ambitions within the higher altitudes of social hierarchy, at least the way it is in other school types. Rather, “making money” seems to be more central concern guiding their possible road maps. It would not be a mistake to claim that school practices also get shaped through this “oblivious entitlement” patterns of thought and related emotional state (Cookson and Persel, 1985). Yet, the students of lower socio-economic background, particularly attending vocational schools, show some social discomfort through blaming their families’ economic conditions as the primary factor of their attendance to those schools.

This study also revealed out some methodological implications for educational research. Understanding what marks the experience of being a student in different educational settings demands a systematic and rigorous analysis of intersubjective construction of “reality” as it pertains to politics of social interaction and the way in which subjectivities of students deem their existence worthy within the social structure. Politics of social interaction is of importance here as it requires closer readings and interpretation in that one can easily shift the focus from intersubjectivity to economic determinism, in the form of romanticized version of social and cultural reproduction. Such an attitude may run the risk of representing students as the passive victims of social structure, pawning in the great chessboard of capitalism and unescapable from the gravity of social and cultural reproduction. Thus, the biggest challenge that this research encountered was related to everlasting question of social inquiry, i.e., how to represent research subjects, in that our preconceptions about the way school works and what it means to be a high school student haunted us in constructing research problem and approach we are supposed to adopt. This is because; we were all high school students once. Presentations will also deal with how we overcome such methodological problems.

**Keywords:** high school student, phenomenology, student experience

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## **Rethinking Equal Opportunity and Justice in Education**

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The purpose of this study is to discuss what equal opportunity statement in education means in today's world and analyse reflections of this on education processes. In accordance with this purpose, notion of "equal opportunity in education" will be discussed over philosophic and political literature and it will be evaluated from the point of justice theories. At first, the historical conditions in which equal opportunity thought has derived will be examined and then current discussions will be evaluated. From the current discussions, deficiencies of equal opportunity thought in terms of social and economic conditions within today's world will be determined and it will be put forward that the notion should be re-discussed in terms of justice and human rights. Finally, the need of redefining of equal opportunity in education notion will be emphasized and conditions of providing a fair equality will be discussed.

Equal opportunity in education approach has come up with the foundation of modern states simultaneously and it has been built on the thought of providing equality to all citizens on public education. According to this fact, regardless of socio-economic inequality, equal opportunity in education will be provided to all citizens and jobs in the public will be distributed in accordance with justice and merit. So, modern liberal nations has abolished inequalities to a degree, which came from before they were built and definition of citizenship has been built within the frame of general public education.

Equality of opportunity thought, which we can consider as a heritage of American and French Revolutions, has tied getting a job in public institutions to success and competence and this right has been provided to all citizens (Turner, 1997). This thought, which has been built on the fact that intelligence, competence and ability should take the place of familial and class origin, has created a formal relationship between equality and merit. However, whether this relationship provides real justice or not has been generally ignored. In fact, accepting all people unconditionally equal means ignoring the differences among them. People who cannot show their merit because of the fact that they lack intelligence, competence or health are unfairly treated in this situation (Solomon, 2004). Similarly, we cannot say that the justice is given for people who do not have equal social and class conditions even if they have equal education opportunity (Bourdieu, Passeron, 2014). When we look at from this point, even if equality of opportunity is deemed as a globally accepted democratic right, using this right effectively is not realized in global level (Bauman, 2013).

Especially, equal opportunity in education statement within current liberal economic conditions has become a frame which produces and justifies inequalities again. In this context, schools have turned into institutions which systematically continue social inequalities and power distribution within the society (Bowles, 1997). So, apart from the fact that education system does not make people free in their choices, it restrains them into their current conditions and prevents social mobility in a sense. Deprivation and inequalities which children experience in public have been re-produced and the school creates subcultures in itself. So, achieves of the students become results of not only intelligence or competence, but also of social regulations in the classroom and the school (Turner, 1997). In short, the

education which is the only way for people, who have disadvantages, to become integrated with the society has become a station where class roles are consolidated and diplomas given mean documents approving social status differences (İdemen, 2012).

In recent years, various justice theories have been put forward to remove these inequalities and to transform equality of opportunity into a radical equality, and thinkers such as Rawls and Sandel have agreed in equalizing the results instead of opportunity equality (Rawls, 2007; Sandel, 2013). However at least, this thought is not seen a realist and applicable one within current market economy. When we evaluate it in terms of our country, it does not have a possibility in practicability. So, what is needed to be done is to detach equal opportunity in education thought from political statement and a baseless argument and to make it practical again. To perform this, the precondition is to remove desperation opposing to disbelief and injustice to the system. The most important step in this context is to strengthen the belief that the potential of the individual can be revealed regardless of the type of education institution where he/she is educated. In order to perform this, of course, reforming education politics and institutions and transforming the system, which evolves to an elitist education, to an equalitarian structure which covers all citizens are needed. To realize this in minimum level, necessary school and classroom environments, which can be used by each individual when they explore their own capacities, are needed.

**Keywords:** Equal opportunity, justice, reform in education.

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## **Suggesting Some Refers for Teaching Chemistry based on an Explanation of Complex Systems Theory**

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### **Purpose**

The importance of science education and its challenges have led to a bulk of studies investigating this topic (for example: Fraser & Tobin, 1988; Mintzes & Leonard, 2006; Abell & Lederman, 2007; Fraser, Tobin & McRobbie, 2012). Among them, There are studies that incorporate philosophy and the nature of science and suggest a revision in science education according to these bases (for instance: Scheffler, 1970; Matthews, 1994; Tobin and McRobbie, 1997; McComas, 2000; Peters, 2006; Niaz, 2009). In this regard, McComas and Olson (2000) state that most of scientific instructions are around the body and terminology of scientific knowledge and overlook the nature of science which is considered a serious failure in science education. Lederman (2007) explains that many studies indicate that the teachers' knowledge about the nature of science is inadequate and even wrong and this could be one of the main reasons for the ineffectiveness of science education.

On the other hand, one of the recent views in the field of philosophy of science is complex systems theory. As Goldman(2007) says, "Complex systems theory is an Idea or a cluster of interrelated ideas such as complex systems, chaos and self-organizing systems theory about nature" (p96-97).

Hooker (2011) also believes that in every science to some degree & in many sciences completely, a general model of complex organisation of dynamic processes has emerged. The model impact every aspect of a science, from what counts as evidence, through concepts of component, interaction, organisation and self-organisation to deep limits on prediction and control and the relations of laws, explanation and the methods of science.

According to what was mentioned the present study aims to present some refers for teaching chemistry according to an investigation over the complex systems theory as a theory about nature.

### **Method**

Regarding the purpose, the study is theoretical in nature and uses the review of literature as a methodological approach as well as logico- deductive approach to synthesize a research territory for the application of complex systems theory as a theory about nature in chemistry education. As Erduran (2009) also indicates, theoretical inquiries can provide the ground for deducing implications for education. Thus the logico-deductive approach is used (Haggerson, 1991) with the aim of deducing general principles guiding chemistry teachers from the complex systems theory as a theory about nature.

### **Findings**

First, the characteristics of complex systems theory about nature including: top-down character; non-linear interactions; emergence; irreversibility; self-organisation; modularity; hierarchy; adaptation & bifurcation are explained. Then it is argued that if chemistry is what chemists do, therefore the chemistry teachers trained in this field establish their teaching and assessment on the basis of explanations and evaluations of attempts undertaken by chemists with complex view throughout the history using the relevant curricula designed for this field. Thus some necessities such as going beyond the simplistic and deterministic epistemology and knowing the dynamic and non-linear nature of chemical events, top-down view towards chemistry and chemical reactions instead of bottom-up view, showing the self-organized nature of chemical events and considering some emergent events in the process of chemical reactions, are mentioned as the necessities to be taken into account. Finally it is mentioned that teaching and assessment methods should involve activities such as historical as well as interdisciplinary and holistic descriptions, classifications, and reviews.

### **Conclusions and Suggestions**

The present study has aimed to present some refers for teaching chemistry according to an investigation over the complex systems theory. According to the findings, in chemistry education there is a need to go beyond the deterministic approach in chemistry curriculum, teacher training, research, and teaching.

**Keywords:** Chemistry, Teaching, complex systems theory.

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## Effects of Urban Renewal on Education of Children

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Urban renewal is defined as “the action of renewing, modifying, developing, reviving and sometimes reconstructing urban texture and infrastructure, which wears down and gets older in time and has potential land value above the current superstructure value and mostly a widespread poverty, according to present socioeconomic and physical conditions with a strategical approach generated by social and economic programs” (Özden, 2006: 217).

In other words, urban renewal is defined as new ways and methods produced for coordinately solving problems mostly arising in deteriorated urban areas and considered as designing a number of policies, actions and corporate structures in order to ensure constant improvement in social, physical, economic and environmental conditions of an urban area (Roberts and Skyes, 2000).

Urban renewal is a project bringing both physical and social change. Actors affected by this process own new buildings and this is the physical dimension of the phenomenon. Changes in their life styles are related to the social dimension. These newly transformed places also create many problems. Social facts have many causes. Families subject to urban renewal have passed to a culturally, economically and educationally different environment. Those who are influenced the most are children. Positive changes are expected in social lives and education of children. This study will discuss which kind of changes will occur in social lives of families, what impact it will make on education of children, and whether there is any change in expectations of families about educational life of their children.

This study basically examines sociological aspect of urban renewal. Urban renewal is among main targets of local authorities and governments in order to ensure proper and balanced development of cities. Social, economic, technological and cultural changes in cities are now outdated and should be renewed. Urban renewal projects are carried on in Turkey, just as in the world. With these projects, it is aimed to change spatial frame of the city and thus create a more coordinated and organized city. Areas put through urban renewal were described as problematic areas in terms of both appearance and life. Thanks to these projects, cities will become nicer and dynamic and social facilities will increase.

Urban areas constitute an interrelated spiral spatial system consisting of economic, cultural, social and environmental components. A change in the system naturally influences other dimensions. This addresses the requirement to look into events from a sociological perspective in order to fully understand the city. The reason is that “everything needs a social analysis for sociological thought. Social analysis of events means emphasizing a multicausal approach in explaining events and phenomena. For sociology, all events and phenomena originate from the society” (Doğan, 2014:7). It is believed that change of places and social environment will have an influence on educational success of children.

In this regard, this study aims to determine the change that occur in education of children from families that go through urban renewal. Qualitative and quantitative research techniques

will be used together. Qualitative study will be in phenomenological design. In-depth interviews will be held with families. Quantitative study will be in screening model.

Phenomenological design aims to reveal experiences and perceptions of individuals in relation to a phenomenon and meanings they attach to them. Data sources in phenomenological researches are individuals or groups that experience the phenomenon, which is the focus of research, and may reveal or reflect this phenomenon. Interview is the main data collection instrument in phenomenological researches. Observation is usually used for providing a basis for or supporting interviews (Yıldırım and Şimşek, 2006).

Research population is Urban Renewal Project of Boğaziçi Quarter and Yeni Mamak, which are in scope of urban renewal conducted by Mamak Municipality and has been put through urban renewal. Stratified sampling method will be used in determining the sample. In stratified sampling, subgroups in the population and rates of these subgroups in the population are determined and it is ensured that subgroups are represented within the sample in the same rate.

Two types of data collection methods, quantitative and qualitative, will be used in the research. A questionnaire will be conducted for determining general demographical and spatial information. In-depth interviews will be held by developing semi-structured interview forms in order to determine cultural and educational problems of families that have gone through urban renewal. There are many classes and types of interview in the literature. For this study, problem-centered data collection method is selected. Problem-centered flow chart consists of problem analysis, structuring interview form, testing interview questions, making interviews (interview questions, probes and spontaneous questions) and recording (Taşçı and Altun, 2008).

Data obtained in consequence of the research will be put on paper. Then, meaningful data will be determined and coded. Codes obtained will be turned into categories and themes. Nvivo, a text-based data analysis program, will be used in coding qualitative data. Quantitative data will be analyzed with arithmetic mean, standard deviation, frequency, percentage, t-test, variance analysis (ANOVA) techniques. Statistical Package for Social Sciences (SPSS) will be used in analyzing data. Qualitative and quantitative questions will be interpreted together according to results of analyses.

**Keywords:** Urban Renewal, Social Change, Education

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