

II. International Dynamic, **Explorative and Active** Learning (IDEAL) Conference

ABSTRACTS BOOK

























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Programme

November 05, 2015

9:00-10:00 : Registration 10:00-10:45 : Opening Ceremony (**Şehzadeler Saloon**) 10:45-11:45 : Prof. Dr. Ahmet Mahiroğlu (Keynote) (**Şehzadeler Saloon**) 11:45-12:00: Coffee Break

12:00-13:00: I. Paralel Sessions

Şehzadeler Saloon	
Chair: Assist. Prof. Dr. Zekeriya KARADAĞ	
Semra Şen	The Examination Of Free Time Activities Corurse's Goals
İsmail Sarıkaya	According To The Teachers' View
Nida Bayındır	Primary School Teachers' Perceptions of School Report
Levent Sevi	
Aynur Çukurcalıoğlu	
Halil Ardahan	Innovative, Dynamic, Explorative And Active Teaching
	Of Some Subjects: An Experimental Study
Elif AÇIN	How do teachers notice students' ability to use and
Zülfiye Zeybek	understand mathematical language?

Sabuncuoğlu Şerefeddin Saloon		
Chair: Assist. Prof. Dr. Ader	Chair: Assist. Prof. Dr. Adem BAYAR	
Müfit Şenel	Fun teaching, Fun Tech-ing! Interactive Educational	
Deren Başak Akman	games for Young Learners	
Şerif Ali Değirmençay	Students' Opinions Related with the Concepts which Take	
Yusuf İslam Şahin	Place in the Third Grade Science Programme (Power,	
	Matter, Light, and Sound)	
Hakan Kör	Research of Distance Education Students Cloud	
Hasan Erbay	Perceptions and Use Cases	
Emre Demir		
Atilla Argüzen		
M. Şahin Bülbül	Dear students, teachers and academicians, Please order the	
Sibel Gürbüzoğlu Yalmancı	lesson about flying: Testing the 5E model and the REACT	
Özlem Oktay	strategy	
Engin Yalmancı		

Strabon Saloon		
Chair: Assoc. Prof. Dr. Ün:	Chair: Assoc. Prof. Dr. Ünal ÇAKIROĞLU	
Barbaros Yalçın	Views about leisure activities of the students studying in	
	the Faculty of education	
Agâh Tuğrul Korucu	Examination the Digital Competence of Teacher	
Ahmet Yücel	Candidates in Terms of Different Variables	
Mustafa M. Gündoğdu	Candidates in Terms of Different variables	
Tarık Gençtürk		
Ayten Tahirli	Participatory Educational Researches	
Halil İbrahim Alıcı	The Relationship Between Metacognitive Awareness Of	
İsmail Can Serdaroğlu	Reading Strategies And Success Of Science Of The 5th	
_	Grade Students In Secondary School	



Ferhat ile Şirin Saloon	
Chair: Assoc. Prof. Dr. Cem Oktay GÜZELLER	
Ertuğrul Çam	The Relation Between Life Long Learning Tendency And
Fatih Saltan	Leadership Level Of Education Managers
Recep Çakir	
Nesrin Özsoy,	Using Active Method Applications in Teaching and
İlker Altındal	Learning Mathematics
Berkay Çakır	
Barış Özkaya	
Zeynep Fidan Koçak	
Buğrahan Ekin	The Comparison of Evaluation of Concept Map and
Şafak Uluçınar Sağır	Structured Grid with Multiple-Choice Test
Fatih Saltan	
Cenk Gezegin	The effect of using simulators in PLC training
Engin Ufuk Ergül	

13:00-14:00 :Lunch

14:00-15:00 : Christopher Sheen - Keynote (**Ferhat ile Şirin Saloon**) 14:00-15:00: II Paralel Sesion

Şehzadeler Saloon	
Chair: Assoc. Prof. Dr. Ertuğrul USTA	
Seyfullah Gökoğlu	The Systems-Based Mentoring Model within the Process of
Ünal Çakıroğlu	Technology Integration
Mücahit Öztürk	
Agâh Tuğrul Korucu	Examination The Secondary School Students' Levels Of
Mehmet Oktay	Computer Games Addiction In Terms Of Different
	Variables
Güner Tural	Examining Effects of Worksheets to Associate
Özge Kol	Thermodynamics Concepts Related Daily Events
M.Said Doğru	The Effect of 3 Dimensional Computer-Based Material
Lale Cerrah Özsevgeç	About Learning The Concept of Meiosis

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assoc. Prof.Dr. A. Aşkım KURT	
Ali Shayan	Investigating the effects of blended learning on
Monirehsadatdastkar	organizational performance: A banking case study
Davood Karimzadgan-	
Moghaddam	
Ulaș ilic	Augmented Reality and Its Reflections on Education in
Osman Gazi Yıldırım	Turkey
Nabiyeva Gulnare	The Process of Construction of Chemical Knowledge in
	a Constructive Learning
Merve Özarslan	A Thematic Reviewing On Master's and Doctoral Thesis
Veysel Bilal Arslankara	Which Made in the Field of Computer And Instructional
Ertuğrul Usta	Technology Training in Turkey in the Last 5 Years



Strabon Saloon		
Chair: Assoc. Dr. Aykut E	Chair: Assoc. Dr. Aykut Emre BOZDOĞAN	
Ünal Çakıroğlu	Teaching Programming Via Web Conferencing: An	
Mücahit Öztürk	Evaluation Using Seven Dimensions of E-Learning	
Seyfullah Gökoğlu		
Arif Akçay	The Examination of Secondary School Student's Social	
Ahmet Naci Çoklar	Media Usage in The Context of Social lives	
Hakan Özcan, Soner	Institutional Motives for Distance Education Centers in	
Yıldırım	Turkey	
Fuat Altunbaş	Facebook As A Distance-Learning Environment	

15:00-15:15 :Cafe Break
15:15-16:30 : Workshop: Cyberbullying in Schools Ferhat ile Şirin Saloon)

Prof. Dr. Hafize Keser

Ress. Assist. Melike Kavuk 15:15-16:30 :III. Parallel Sessions

5.13-10.50 .III. Farallel Session	~
Şehzadeler Saloon	
Chair: Assist. Prof. Oğuzhan ÖZDEMİR	
Mustafa Yağcı	The Relationship between Thinking Styles and Attitudes of
Uğur Başarmak	Preservice Teachers from Department of Computers
	Education and Instructional Technologies (CEIT) Toward
	Information and Communication Technologies
Abdullayeva Sudaba	Knowledges' appropriation and creation methods
Sona Hamzayeva	
Nurhayat Varol	The Usage of Social Media for Distance Education: A Case
	Study for Sam Houston State and Firat Universities
Pınar Ural Keleş	The Effects of Elective Course "Science Applications" on
Süleyman Aydin	Science Lesson: A Qualitative Study with 6th Grade
Ayşegül Öner	Students
Oğuzhan Özdemir	The Effects of Simulations and Animations Applied in the
İbrahim Enes Öner	Computer Course on Student's Motivation

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assist. Prof. Dr. Erman UZUN	
Fulya Sarı	Who Should Decide on Educational Technology Reform Policies and Why?
Hamdi Erkunt	Conceptual tools for depicting and improving pedagogical picture before technology integration
Edit Lezha	Evaluating the role of organizational commitment and occupational stressors in education settings; a theoretical approach
Fatma khanim Bunyatova Irada Malikova	The human model of education or the education model of a human
Ali Kürşat Erümit Vasif Vagıfoğlu Nabiyev	Teachers' Opinions about Intelligent Tutoring System Prepared for Improving Problem Solving Skills of Students



Strabon Saloon		
Chair: Assist. Prof. Dr. Do	Chair: Assist. Prof. Dr. Doğan YUKSEL	
Hasan ÇORUK Recep ÇAKIR	The Effect of Multimedia Use on Science and Technology Course Motivation and Computer Anxiety of 8th Grade Students	
Ekrem Solak	Virtual reality in foreign language education: A Literature	
Gamze Erdem	Review	
Emrah Ekmekçi	Integrating Edmodo into Foreign Language Classes as an Assessment Tool	
Nursel Yılmaz	An Investigation of Computer Based Mathematics Instruction in Early Childhood Education: A literature review of the recent empirical studies	
Yasin Arslan	Using Dynamic Environments in Foreign Language Teaching	

Ferhat ile Şirin Saloon		
Chair: Assist. Prof. Oktay	Chair: Assist. Prof. Oktay ESER	
Emine Tok	Preliminary Analysis of Virtual and Augmented Reality in	
Jonathan Broutin	FLT Classrooms.	
Deniz Demirkan		
Ayfer Su Bergin	The ELT Preparatory Class Students' Strategy Using	
Arif Sarıçoban	Profiles and Attitudes Towards Foreign Language	
	Learning: Amasya University Sample	
Dönercan Dönük	The Evolution of Grammar Teaching	
Doğan Bulut	A survey of existing OER resources in the field of language	
Brahim Ercan	processing and their uptake in the context of Turkish	
Baki Dursun	Higher Education	
Mustafa Naci Kayaoğlu	Cultural Representations in EFL Course Books	
Zeynep Öztürk Duman		

16:30-16:45 : Break Time 16:45-17:45 : Workshop Prof. Dr. Asaf Varol (Şehzadeler Saloon) 18:00: Dinner



November 06, 2015

09:00-10:00: Prof. Dr. Mine YAZICI (Keynote): Turkish Experience of Translator Training

(Ferhat İle Şirin Saloon)

09:00-10:00: Workshop: Academic Writing Assoc. Prof. Dr. Yüksel GÖKTAŞ

(Şehzadeler Saloon)

10:00-10:15: Cafe Break

10:15-11:15: Motivation, Learning, and Technology: Applying the ARCS-V

Motivation Model.

Prof. Dr. John Keller (Şehzadeler Saloon)

11:15-11:30 : Cafe Break

11:30-13:00: IV. Paralel Sessions

Şehzadeler Saloon	
Chair: Assist. Prof. Dr. Müge ADNAN	
Mutlu Pişkin Tunç, İlhan	Technological Pedagogical Content Knowledge of
Karataş, Nurbanu Yılmaz	Prospective Middle School Mathematics Teachers
Gülzade Karaca	
Cemalettin Ayas	The use geographic information systems in teaching
Bekir Taştan	geography and social studies courses
Erman Yükseltürk	How to Use the Kinect in Educational Environments: A
Serhat Altıok	Literature Review
Ali Oluk	The Effects Of Scratch On Six-Grade Students' Algorithm
Fatih Saltan	And Problem Solving Skills
Bekir Tastan	Opinions Of Geography And Social Studies Teachers
Cemalettin Ayas	About The Use Of Geographic Information Systems (The
	Sinop Case)
Kürşat Arslan	Pre-service physical education students' perceptions about
	Web 2.0

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assist. Prof. Dr. Cemalettin AYAS	
Zafer Karadayı	Issues related to Virtual, Augmented and Mixed Reality
Muzaffer Özdemir	Environments and the Conceptual Confusion Arising from
	the Environments
Fatmir Vadohej	Teaching through the development of critical thinking in
Mehdi Kroni	primary school (grade IV).
Eranda Bilali (Halluni)	File Students' Assessment as a Self-Assessment Tool in
	Primary Education (Classes' 1st-3rd)
Stephens Oluyemi	Digital Exclusion: A study of distance learners in Nigerian
Adetunji	prisons
Nel Norma Magaret	
Seda Özer	The effect of using interactive book in mathematics
Yalın Kılıç Türel	instruction on achievement and motivation
Jale İpek	Active Learning Geometry With Tangram Puzzle
Duygu Vargör Vural	



Strabon Saloon	
Chair: Assist. Dr. Ekrem SOLAK	
Rasim Çömez Hasan Aksoy	Rethinking the Role of Entertainment and Playful Learning in ELT classroom
Sedat Mulayim Miranda	Online Interpreter Training using the Community-of-
Lai	Inquiry Framework
Oktay Eser	
Sevda Pekcoşkun-Güner	A Corpus-based Approach in Translator's Training: An
Edip Serdar Güner	Initial Attempt
Dilek Çakıcı	The Contribution Of Dyned To Foreign Language
Emre Ak	Learning
Dilek Çakıcı	Parents' And English Language Teachers' Views About
	Early Foreign Language Education In Turkey
Sinem Canım Alkan	Use of Cloud-Based Translation Management Tools in
	Translation Education
A. Turgay Kurultay	Graduate Education in Translation Studies – Observations,
	Experiences and Forethoughts

Ferhat İle Şirin Saloon	
Chair: Assoc. Dr. Süleyman YAMAN	
Barış Mercimek	Study of Determining the Criteria for FeTeMM
Pınar Ural Keleş	Opinions of Students who Attended 2015 TIMMS and
Süleyman Aydın	Teachers about the Exam: Sample of Ağrı
Muslim Ovalı	An Investigation of Illustrations in Social Studies Course
Bulent Tarman	Books with Regard to Stereotypes
Cem Oktay Güzeller	An Investigation of Students' Computer Attitudes in PISA
Levent Ertuna	2012 Turkey Sampling
Özkan Yılmaz	Usage of mobile interactive technology to support
	formative assessment as feedback and learning tool
Dogan Yuksel	A Perspective to Examine Learning Environments:
Banu Inan-Karagul	Discourse Analysis

13:00-14:00 : Lunch

14:00-15:00 : Panel: Management Problem and Solution in Distance Education

- Assoc. Prof. Recep ÇAKIR (Chair)
- Prof. Dr. Abdullah Çavuşoğlu
- Assoc. Prof. Sönmez Pamuk
- Assoc. Prof. Dr. A. Aşkım Kurt

15:00-15:15 : Coffee Break

15:15-16:30: Panel: Translation and Technology (Ferhat İle Şirin Saloon)

- Assist. Prof. Dr. Oktay Eser (Chair)
- Prof.Dr.Turgay Kurultay
- Assist. Prof.Sinem Canım Alkan



15:15-16:30 : V. Paralel Sessions

3.13 10.30 . V.1 draici Bession	<u> </u>
Şehzadeler Saloon	
Chair: Assoc. Prof. Dr. Yalın Kılıç TÜREL	
Cristina Nicolaescu	Quality Assurance In Andragogical Self-Assessment
	Methods Of Online Learning
Oksana Fotina	Simulation as a Phenomenon of Open Educaton
Servet Kılıç Nevzat Yiğit	Investigation of Vocational High School Students'
	Perceptions Of Distance Education In Terms Of Different
	Variations
Müge Adnan Burçak Boz	Learning at a Distance on Campus: Readiness,
	Expectations and Satisfaction Level of Engineering
	Students for Calculus Online
Fatih Erdoğdu, Mehmet	Distance Education Research Trends in Thesis and
Kara, Mehmet Kokoç	Dissertations conducted within Turkish Universities in the
	Last Decade

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assoc. Prof. Dr. Ahmet BACANAK	
Yavuz Bayram	Technological Possibilities And Materials In Literature
	Teaching And Researches
Mustafa Naci Kayaoğlu	Understanding Pronunciation Learning Strategy Use: A
Şakire Erbay	Vignette Analysis
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Zeynep Tatlı	The Effect of Digital Storytelling Application on Student
Turgay Erdemir	Opinions about Cloud Computing
Serhat Altıok	IT Teachers' Self-Efficacy Beliefs towards Computer
Erman Yükseltük	Programming
Hasan Sağlamel	English Major Students' Perspectives on Pronunciation
M. Naci Kayaoğlu	Instruction

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Özlem Özçakır Sümer	The Relationships Between Preservice Teachers'	
Hamza Çalışıcı	Mathematical Literacy Self Efficacy Beliefs,	
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Esra Çakır	The Relationship between Students' Intellectual Risk-	
Süleyman Yaman	Taking Skills and Metacognitive Awareness and Academic	
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Kezban Orbay, Bilal Öncü	Social Studies Teacher Candidates' Opinion, Attitudes And	
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Özlem Özçakır Sümen	The Comparison of Turkey-Shangai (Chinese) PISA 2012	
Hamza Çalışıcı	Mathematical Literacy Results	

16:30-16:45: Cafe Break



16:45-17:45: VI. Paralel Sessions

10	0:45-17:45: VI. Paralel Sessions	
	Şehzadeler Saloon	
	Chair: Assist. Prof. Dr. Orhan CURAOĞLU	
	Gülşah Sezen Vekli	Science and Technology Teachers' Views With Regard to
	Serap Ekmekçi	Gems (Great Explorations in Math and Science)
		Applications
	Arzu Orhan	The value of homework in the course 'Schreibfertigkeit I
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	Mustafa Naci Kayaoğlu	An Investigation into Medical Students' English Language
	Raşide Dağ Akbaş	Needs: The case of KTU
	Süleyman Aydin	Academicians' Views on Constructivist and Operational
	Leyla Aydin	Learning in Science Education
	Pınar Ural Keleş	
	Mehmet Akif Haşiloğlu	
	, ,	

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assoc. Dr. Ahmet Naci ÇOKLAR	
Emre Baysan Çelebi Uluyol	Augmented Reality Technologies and Fields of Use
Şenol Şen Senar Temel	An Analysis of Prospective Chemistry Teachers' Attitudes towards Information and Communication Technologies, and of Their Confidence in Technological and Pedagogical Content Knowledge
Erman Uzun	Students' attitude towards Edmodo as a supplementary tool for higher education
Süleyman Aydın Nesrin Ürün	The Effect of Formative Assessment Techniques on Students' Academic Success and Their Attitudes in the Unit of 7th Class "Solar System and Beyond: Space Puzzle"

Strabon Saloon	
Chair: Assoc. Prof. Dr. Erman YÜKSELTÜRK	
Bilal Yalçın	Health Beliefs of University Students With Regard To
Fethi Arslan	Sportive Recreational Activities
Yusuf Ziya Olpak	Examination of the Relationship between Teacher
Agah Tuğrul Korucu	Candidate's Learning Approaches and Academic
	Engagement
Prof LDM "Oupa"	Identified challenges of teaching objective sciences in an
Lebeloane	environmentally directed way
Şükran Uçuş	Metaphors of pre-school teacher candidates and pre-school
	teachers about the concept of play and toy



Ferhat İle Şirin Saloon	
Chair: Assis. Prof. Dr. Ümit ÇELEN	
Adem Bayar	Determination of Computer and Instructional Technologies
Buğrahan Ekin	Education Teacher Candidates' Hope for the Future: A
	Qualitative Research
Mithat Akgün	Measure the Motivation of Middle School Students towards
Gülay Koru Yücekaya	Learning Mathematics: A Scale Development Study
Kadir Dışbudak	
Yunus Emre Öner	The Relationship between Students' Intellectual Risk-
Talha Ridvan Aydın	Taking Skills and Intellectual Motivational Skills
Süleyman YAMAN	
Mahmut Kantar	Development of Mobile Learning Material for 9th Grade
Mevlüt Doğan	Physics Course To Use in FATIH Project: Force and
	Motion Unit

17:45: Dinner



07 November 2015

09:00-10:00: Panel: A Critical Look at Educational Research

- Prof. Dr. Hafize Keser (Chair)
- Prof. Dr. Halil İbrahim Yalın
- Prof. Dr. S. Sadi Seferoğlu
- Prof. Dr. Mukaddes Erdem
- Prof. Dr. Deniz Deryakulu
- Assoc. Prof. Dr. Abdullah Kuzu

10:00-10:15 Cofee Break

10:15-11:45 :VII. Parallel Session

Şehzadeler Saloon	
Assist. Prof. Dr. İlker KÖSTERELİOĞLU	
Ferhan Odabaşı	Technology Differentiation
İhsan Düşmez	Rational Emotive Behavior Based on Academic
Yaşar Barut	Procrastination Prevention Training Programme of
	Effectiveness
İjlal Ocak	Metaphors of 4th Grade Students about Organs
Gürbüz Ocak	
Selcen Süheyla Ergün	
Salih gülen	Tool of association concept; volume of concept
Alpay Akşin	The Investigation Of Technological Pedagogical And
	Content Knowledge (Tpack) Self-Efficacy Perceptions Of
	Secondary School Teachers': A Sample Of Amasya
	Province
Gürbüz Ocak	Evaluation (need, objectives and content) of Primary 5th -
Neriman Ataseven	8th Grade Physical Education Curriculums

Sabuncuoğlu Şerefeddin Saloon	
Chair: Assist. Prof. Dr. Alpay AKSİN	
Ertuğrul Ergün	Computer Aided Analysis of Multiple Choice Test Results
Ali Aydın	
Mehmet Fatih Yiğit	Learning Difficulties and Use of Visual Technologies in
Mustafa Başer	Learning to Program
Ufuk Töman	Investigation of the Development of Reflective Thinking
Sabiha Odabaşı Cimer	Ability in Teaching of Pre-Service Science Teachers
Atilla Cİmer	
Gürbüz Ocak	The Relationship Between Pre-Service Teachers' Critical
Eray Eğmir	Thinking Tendecies and Problem Solving Skills
Safa Özgürler	Examination of Teacher Candidates' Environmental
Arzu Cansaran	Literacy Levels
Vildan Özdemir	The Use of Language Learning Strategies in Coursebooks
Mehmet Burçin Özkan	



Strabon Saloon	
Chair: Assist. Prof. Dr. Faru	ık AYLAR
Aykut Emre Bozdoğan Kerem Bozdoğan	An Investigation And Evaluation of Science Centres Websites In Turkey
Fethi Arslan	Implication of Trait Anger and Anger Expression Styles Scale in a New Modelling between University Students from Various Social and Cultural Environment
Süleyman Eren Yürük Uğur Çakmak	The Effects of a Digital Timeline Material Prepared For History Course on 8 th Grade Students' Academic Success.
Nermin Bayındır Kocaman Bayram Ali Ersoy Hasan Ünal Kadir Kocaman	Effect of instruction with concrete materials to mathematics success of 11th grade students
Tugay Tutkun Adil Çoruk	Ethnocultural Empathy Level of Teacher Candidates
Suphi Önder Bütüner Adman Baki	From Babylonian Numerals To Pythagorean Triples
Gülcan Özer Nurettin Şenyer	Recent Developments In The Analysis of Human Action

Ferhat İle Şirin Saloon		
Assist. Prof. Dr. Fatih SALTA	AN	
Turgay Çınkırdaklı	Byzantine Empire Place in The Secondary School Social	
Gökhan Abanoz	Studies Textbook and High School History Textbooks:	
	After and Before Constructivism	
Mehmet Kahraman	Key points for developing trust in e-mentoring	
İsmail Yildiz	Effects Of Sms Usage On Preservice Teachers Motivation	
Fatih Saltan	During The School Experience Period	
H.İbrahim Akyüz		
Güler Tuluk		
Yasemin Akşık	Evaluation of the Educational Process in Distance Graduate	
İlker Kösterelioğlu	Programs from the Perspectives of the Graduate Students	
Gökhan Abanoz	The Place of Historical Places Located in Amasya	
Turgay Çınkırdaklı	Teaching of History Topics in the Curriculum of 6th And	
	7th Grade Social Studies Courses	
Yahya Çıkılı	Views Of Special Education Teachers About The	
Serdal Deniz	Effectiveness Of Professional Studies	
Emine Kurt		
Beyza Özkeş	Examining the Relationship between Teachers' Individual	
Sinan Kaya	Innovativeness and Technology Acceptance Status	

11:45-12:00 :Coffee Break

12:00-13:00 :Conce Break 12:00-13:00 :Closing Ceremony 13:00-14:00 :Lunch 14:00-18:00 :City Tour





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Keynote Speaker

'Baby Steps, with Technology'

Christopher Sheen

Oxford University Press

This presentation is a hybrid of two themes. The first part examines the need to analyze the language learning environment in Turkey coupled with research about scaffolding and current student levels of attention spans. Part two embraces the aspect of scaffolding in order to promote skill improvement and confidence, highlighting a doable daily activity that is applicable in its base form and also flexibly in a MALL context. Finally, the presentation will help teachers look at individual lessons in the broader context of helping students achieve beginning to year end goals, enhanced with technology. Most beneficial for teachers of prepyear and other communicative classes.

Keyword: language learning, MALL, individual lessons



Keynote Speaker

Turkish Experience of Translator Training

Mine Yazıcı İstanbul University, İstanbul, Turkey

Turkey has come from a long tradition of translation activity, which dated back to the Ottoman Empire (1299-1923), since it served not only as a tool of international correspondence, but also as a means of creating and developing literary polysystem especially after the foundation of Turkish Republic. It is for this reason that she has placed a special emphasis on translation activity. As a result of such intensive translation activity, it has long established norms in the field of translator training. However, the norms generally concerned linguistic norms since trainers referred to translation as a means of teaching language in face of the difficulties arising from distant cultures and languages. Accordingly, the linguistic norms were generally confused with translation norms. This, inescapably, ends in opening new departments of translation studies, and urges them to reshape their training programs. However, most of them are not aware of the international standards adopted in translator training. In the light of these preliminary remarks this paper deals with in what way cultural diversities, learning habits and the logics of languages affect the way the students acquire "translation competence". Within this framework, this paper discusses cultural, linguistic and pedagogical barriers of Turkish students from the perspective of translation theory. Second, it focuses on the professional competency of the trainers in filling the gap between theory and practice by studying a Turkish student's translation assignment to prove in what way trainers sound theoretical knowledge may change the past learning habits of trainees, and help them gain" translation competence" based on the contemporary theoretical approaches adopted by internationally acknowledged professional standards. Finally, it discusses why it is essential to disseminate the nationwide network university understanding when considered the increasing number of departments of translator training founded in Turkey over the past two decades.

Key words: translator training, logics of languages, cultural barriers



The Elt Preparatory Class Students' Strategy Sing Profiles and Attitudes towards Foreign Language Learning: Amasya University Sample

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Arif SARIÇOBAN Hacettepe University , Ankara, Turkey

The unsatisfactory language performance of L2 is among very common complaints voiced by the language teachers and educators for many years. These complaints push the applied researchers in the field of learning and teaching L2 searching for the causes of these kinds of problems and offering recommendations for solutions. Therefore, the need for this attempt dates back to the early years of 1970s as the majority of the research focused on developing the teaching methods and instructional materials. Parallel to the great efforts to understand the nature of the learning and teaching, since the early years of 1970s, great emphasis has been placed on social, psychological and affective factors that enhance or inhibit L2 success and achievement. Motivation, personality, learning style is among these variables that sound important places in different research. Taking a further step, this research aims to investigate the role of strategies and attitudes in L2 learning and teaching settings where English language has a role of foreign language as well. For this purpose, this research seeks the answers of what strategies the ELT preparatory class student use, whether the students' achievement differs according to the strategy they use or not, what the students' attitudes towards foreign language learning are, whether the students' achievement differs according to the attitudes towards foreign language learning and there is a meaningful relation between the students' strategy using profiles and attitudes towards foreign language learning or not. 22 Amasya University ELT preparatory class students, enrolling in 2014- 2015 academic year, consist the scope of this research. The data provide basis for this research have been collected via two different data collection instruments which are labelled as SILL (Strategy Inventory for Language Learning) and a questionnaire on attitudes towards learning a foreign language. The strategy inventory for Language Learning (SILL) is for the students of a second language developed by Oxford (1990). This inventory consists of 5 parts aimed to define the students strategy profiles in terms of remembering more effectively, using all mental process, compensating for missing, organizing and evaluating, managing emotions, learning with others. The inventory comprises 50 items each of which is labelled with the options that range from "1= Never or almost never true for me", "2= Usually not true of me", "3= Somewhat true of me", "4= Usually true of me" and "5= Always or almost always true of me". The questionnaire on attitudes towards foreign language learning was adopted by Tuncok (2010) from Horwitz's (1988) Beliefs About Language Learning Inventory (BALLI) and the Attitude/ Motivation Test Battery (AMTB) by Gardner (1985) adding eight more items. The questionnaire consists of 31 items and the answers are labelled as 7 point likert-type format sequencing from 1(totally disagree) to 7 (totally agree). In the study, both qualitative and quantitative research methods were applied together. For the data analysis of this study, SPSS 17.00 package program for social sciences was used throughout the whole process. According to the findings, this research shares the information and insight that learners' strategy using profiles and attitudes towards foreign language learning should be kept in mind during the



applications of all classroom activities especially in the foreign language learning settings. Moreover, the findings have significant implications for research on classroom instruction, material design and teacher education as well.

Key Words: Language learning, strategies, attitudes, foreign language learning and teaching



An Investigation of Students' Computer Attitudes in Pisa 2012 Turkey Sampling

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Levent ERTUNA Hacettepe University, Ankara, Turkey

PISA (Programme for International Students Assessment) is one of the world's most extensive projects that is organized by OECD (Organization for Economic Co-operation and Development) whose main goal is to determine the success of education systems in raising manpower countries need for economic progress. PISA evaluates 15 years old students' basic knowledge and skills in OECD member and non-member countries, in three year intervals. PISA evaluates not only cognitive features such as students' reading skills, math and science literacy but also affective features such as attitude, self-efficacy, self-concept that is thought to influence students' achievement. Some of the other variables regarded as significant by PISA are related to computer technology; computer literacy, computer usage habits and attitude towards the computer which are thought to have a big part for students' future. Attitude towards computer includes all the reactions of person to computer itself, computer usage and computer users (Liao, 1999).

This study aims to determine students' computer attitude in Turkey sample of PISA 2012. In this context, it was examined whether attitude of students towards computer change according to gender, types of school, use of internet at home and school (weekdays and weekend).

This is a descriptive survey model which aims to reveal the attitude of students, who attended in PISA 2012, towards computers in terms of various variables. Descriptive studies are researches which try to describe and explain "What are the events, objects, entities, institution, groups and various fields?" (Kaptan, 1998:59). The population of this study is comprised of 15-years old 485,490 students who selected randomly from 65 countries to PISA and represented approximately 28 million students (PISA; 2012). This research's sample is composed of 4538 Turkish students participated in PISA 2012. Computer attitude scale (CAS) that applied in PISA 2012 was used as a data collection tool. CAS is formed in two factors which are importance and limitations of the computer as a tool for school learning. This scale includes these items: "The computer is a very useful tool for my schoolworks." and "Information obtained from the Internet is generally too unreliable to be used for school assignments.". All factors in that scale were examined with 3 items. Moreover items were measured by 4 rating scales stated as "Strongly agree." (1), "Agree" (2), "Disagree." (3), "Strongly disagree." (4) (OECD, 2013). Except this, items, which examine the students', who take part in PISA 2012 student survey, internet usage at home and school, were used. In the analysis of the data, firstly, the construct validity of the computer attitude scale was examined with confirmatory factor analysis, based on internal consistency Cronbach Alpha coefficient was calculated. Differences among groups in Computer attitude scale was examined with multivariate analysis of variance (MANOVA).



While students' computer attitude shows no difference for school learning according to gender, significant differences were found for limitations of the computer as a tool for school learning. Although computer attitude shows significant differences according to students' school types, practically differences for the importance of computer for school learning does not have meaning. In addition to these, analysis for students' internet usage duration at school showed significant difference, but it was concluded that this does not have any practical meaning. The analysis made according to students' internet usage duration weekdays and weekend at home show that computer attitude is seen to differ in two factors.

Although, in terms of gender, male students have advantages in the importance of computer attitude for school learning according to the findings of research, there is not a big difference for female students. However, results have found which favor female students for limitations of using computer for school learning. While the findings are similar to some results in the literature (Altun, 2011; Güzeller, 2009), some studies do not match (Çelik and Ceylan, 2009; Köse and Gezer, 2006; Kurt, İnce and Arslan, 2014; Tezci, 2009). In terms of school types, while general high schools have advantages for the importance of computer in the students computer attitudes for school learning, police colleges have advantageous differentiation in limitations of using. Findings in first extent are similar to Güzeller (2011) and Tuti (2011) 's research results. Çelik and Ceylan (2011) found that students' computer attitude do not differ according to high school types in their study. Considering the time that students spend on the internet, differentiation is seen in terms of importance of computer for school learning for the benefit of students who do not use internet at school. The remarkable condition in terms of internet usage duration at home is that rising internet usage both weekdays and weekend does not create much disparateness for computer attitude.

Keywords: PISA, computer attitudes, computer attitude scale, internet usage duration



Simulation as a Phenomenon of Open Educaton

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Being relatively autonomous structures, higher educational institutions depend on the conformity level of their internal organization to external conditions. Social development causes the features of external circumstances that influence the education system all over the world. Modern education system is characterized by three key points: information and communication technologies, openness, application specific knowledge. Evolution of information and communication technologies has enhanced the openness of communication continuum. The openness and accessibility of communication with peers in the field of science and education provoked selection of an intermediary language that facilitates the process of interaction. In many universities in the world appeared the mandatory requirement to faculty members to be able to express their ideas in oral and written way at least in one foreign language. As English is comparatively easier to learn and since the English-speaking countries succeeded in promoting their education standards, the English language has become the medium of interaction for various cultures, for many scientific schools. However, nonlinguistic students and faculty members are frustrated when they have to learn the language. Another problem is the absence of the necessity for most of students and faculty members to use a foreign language daily. The solution of the problem could be method of simulation imitation of various situations for training purposes.

The paper describes the experience of large-scale simulation for encouraging the faculty members and students of a higher educational institution to learn academic English and to apply their language knowledge and ability in the quasi-real situation. Since 2010, five conferences were held on the main theme "Information systems in science and life" in the English language, from eight to ten reports each time. Three main competencies that are in demand in modern education system and in science – language ability, ability to deal with information, and knowledge in a certain field – were activated. To make a sense of the using English, some foreign participants, face-to-face and online, were invited to the conference. The number of participants from the educational institution was eight speakers each conference. Simulation is obeyed a rigorous scenario. To achieve the aim successfully a participant should act in a certain and correct way. For instance, the report must be accompanied with a presentation that must have a glossary. As well as many other features of a real conference are characteristic for the simulation event. Acting in accordance with the scenario, participants get specific reaction of the environment and recommendations that help them to validate their activities, skills and knowledge.

Using the method of included observation it was established that the advantages and disadvantages of the event are as following: large-scale simulation demands consulting of an English teacher, in order to lower costs online-conferences are preferable, simulation conferences are a good way to promote the national culture and national education standards. Simulations as an interactive method serve the opening the education systems and promoting them worldwide. Psychologically, the large-scale simulation method allows participants to analyze and validate not only their academic language skills but their ability to public



speaking. The event has become popular with students and faculty members that plan to participate in various international events.

The idea of such simulation activities comply with the principles of the open education: person-oriented character, practical orientation of content and joint activities, problematic content and conversational character of interaction in the training process, reflexivity, variability and supporting motivation approach.

Keywords: open education, promotion of an education system, large-scale simulation, language ability, information and communication technologies.



An Analysis of Prospective Chemistry Teachers' Attitudes towards Information and Communication Technologies, and of Their Confidence in Technological and Pedagogical Content Knowledge

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Today, when information has been increasing rapidly and technology has been gaining importance, for individuals to adjust into this process and thus to keep up to date is possible by following technological developments closely. Countries with developed technology need individuals who can use technology, can produce and can reach the increasing information. Teachers have an important role to play in educating those individuals. Thus, a need is felt for courses to raise the technology use capabilities of teachers who are going to train the next generations. Teachers' success in integrating technology with their classes is dependent on training they are going to receive. Yet, technology use in classes is done only by teachers of computer education and instructional technology. However, the integration of such courses as biology, physics, and chemistry - which involve abstract concepts - with technology has become an obligation. On the other hand, the inadequacy of chemistry laboratories in schools and failure to allocate sufficient budget for chemicals hinder teachers to do experiments important for chemistry courses during their instruction. The teaching of chemistry courses with technology becomes important at this point. For instance, by means of experiments to be made possible through virtual chemistry laboratories, students can inquiry research, make observations, and thus important contributions can be made to their learning. In a similar vein, teachers who have integrated technology into their classes can also employ videos, audios, animations, and such visuals in their classes. In consequence, prospective teachers' - especially prospective chemistry teachers'- attitudes towards technology as well as their confidence become important. Prospective teachers' positive attitudes towards technology would also lead to improvement in information and communication technologies literacy required by the age we live in. Along with this improvement, prospective teachers will use technology in their own lives and they will also make active use of technology in their schools (Günbatar, 2014). Yet, it is not sufficient for teachers just to have positive attitudes towards using technology. It is also necessary that students develop confidence in terms of using technology in classes. Therefore, prospective teachers need to develop their technological pedagogical content knowledge before graduation from University. Technological Pedagogical Content Knowledge (TPCK) is composed of such components as content knowledge, pedagogical knowledge, technological knowledge, pedagogical content knowledge, technological pedagogical knowledge, technological content knowledge, and technological pedagogical content knowledge. While prospective chemistry teachers acquire the necessary skills in terms of content knowledge and pedagogical knowledge, they do not acquire the content knowledge and pedagogical knowledge related to technology on graduation. It is not believed that computer courses included in domain teaching programmes enable prospective teachers to develop positive attitudes towards using technology or to have confidence in this respect. Therefore, this study aims to analyse prospective chemistry teachers' attitudes towards information and



communication technologies as well as their confidence in TPCK. Information and Communication Technology Attitude Scale (ICTAS) developed by Günbatar (2014), and the Technological Pedagogical Content Knowledge Confidence Survey (TPCKCS) developed by Graham et al (2009) and adapted into Turkish by Timur and Taşar (2011) were used in this research as the tools of data collection. The study was performed in the survey model, one of the quantitative research methods. 53 prospective chemistry teachers participated in this research. The TPCKCS consists of four dimensions: technological pedagogical content knowledge, technological pedagogical knowledge, technological content knowledge, and technological knowledge. The ICTAS, on the other hand, consists of such dimensions as general knowledge and communication technologies bias, access to information in virtual media, computer hardware, software use, and communication in virtual media. The correlations of the sub-dimensions of both scales were analysed through correlation analysis. In addition to that, a correlation analysis was performed in order to determine the relations between the total scores of both scales. At the end of the study, the correlation coefficients for the scores that prospective chemistry teacher have received from the sub-dimensions of both scales are presented.

Keywords: Attitude, confidence, information and communication technology, technological pedagogical content knowledge



A Corpus-Based Approach in Translator's Training: An Initial Attempt

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Corpus-based methodologies dating back to 1990s could be accepted as a new area of research in Translation Studies. Corpus-based Translation Studies, based on Toury's Descriptive Translation Studies, have been generally used for determining translation universals emerged in groups of texts. Corpus use in Translation Studies, via analyzing the texts or the products, contributes to shed light on the process of translating which Toury calls a "black box". Product to process approach motives a study from description to theory in an inductive manner. Quantitative analyses on corpora may also direct Translation Studies to a more objective ground from subjective judgments.

Corpus-based studies could be especially used in Specialized Translation training in order to enhance trainees' translation skills. There are many grounds for corpus usage in translation training. First of all, although the translation tutor may have the qualifications required for translator's training, s/he may not have all necessary knowledge on a specific domain. Therefore, studying on a corpus shall be beneficial both for tutors and trainees.

Corpus use in translation courses supports trainees to gain the skills that will be used in professional life via providing them a more active learning environment. Unlike traditional translation training approaches, corpus-driven approaches offer trainees a wide spectrum that contains parallel and comparable texts. Trainees could retrieve data from large amounts of language material and become a researcher via actively participating in the learning process. Corpus-based translator's training could encourage trainees' creativity and self-confidence.

Comparable and parallel corpora used in translator's training direct trainees to focus on contexts rather than just referential meanings. Therefore, corpora offer more choices for specialized translations than dictionaries could offer. In this way, trainees could see a concept in a compilation of texts while studying on the corpus.

In this study, a corpus has been designed to be used in technical translation courses. Also, a software has been developed in order to transfer the texts into the electronic medium. The developed software has been equipped with a module for analyzing data such as concordances, wordlists, type/token ratios etc. which could be retrieved from the corpus in order to be used in translator's training.

User's manuals have been compiled in accordance with the objective of the study. One part of the corpus includes user's manuals in English as the source language and their translations into Turkish as the target language. Original and translated texts have been aligned on sentence level. Sentence alignment in the parallel part of the corpus has been realized semi-automatically via the developed software.



A trainee could discover the semantic, stylistic, syntactic, textual and contextual choices of the professional translators while studying on the parallel part of the corpus. A trainee who discovers the translation procedures; that's to say, "translation universals" of that genre via studying on parallel texts, could make more coherent and rational choices within his/her own translating processes. Also, a trainee could detect the similarities and differences between source and target texts which would contribute to the quality of future translations.

The comparable part of the corpus includes a reference compilation of user's manuals of Turkish brands. This part could reveal the textual characteristics of texts originally written in Turkish. Comparative analyses between translated texts and non-translated texts may show to what extent the translational language differs from the original language. Based on the analyses, the trainee may take more target-oriented decisions while translating and may produce a more functional translation that optimally addresses to the tastes of target audience.

Consequently, corpus use in technical translation courses enables trainees to deal with huge amounts of original and translated texts, to develop translation skills and world knowledge. Using a technological tool will support them to participate in the learning process actively. Corpus-based training may contribute to the professional life of trainees in the future by offering them a different learning perspective. The developed tool could also be used by a professional translator in order to discover translation universals of the specific genre on which s/he studies.

Keywords: Corpus-based translation studies, translator's training, translation universals, technical translation



The Value of Homework in The Course 'Schreibfertigkeit I Und Ii 'For Gfl At The Uludag University

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Homework has been a permanent topic in many fields of research and study for years now and is therefore of big importance in schools and Universities, being an unbearable part of both. Homework is like a window, giving other people a sight into the classroom, showing on which topics the students currently work, what they aim to learn and with what kind of teaching aids and media the students learn to work with.

This study aims to demonstrate how much homework in the subject 'Schreibfertigkeit I und II (Writing Skills I and II) is appropriate, what kind of homework is possible during class and how the teacher can give support the best way.

For the first two semesters of the subject 'Schreibfertigkeit' three hours of class per week is planned. The students of the Uludağ University study German as foreign language in the teachter-training program, which enables them to teach German after graduation in public schools, language courses and private schools.

The students of this study are only in their first year of learning German, however they took intensive German lessons in their preparation course one year ago. Therefore, in this study they are not classified as students without knowledge of German, but as students having taken German for 28 weeks and 30 hours in total. Consequently, the students of this study have a language level of A2.

In the class 'Schreibfertigkeit I und II' the course and workbook 'Netzwerk – Deutsch als Fremdsprache / B1.1+2' has been used. After each chapter of the textbook the students were given homework to do. With this homework, students had the opportunity to practice and that way strengthen their new knowledge and to share their opinion on that specific topic. The students had to hand in their homework the next class, which the teacher handed back proofread by the next class. The students had to copy and rewrite this proofread homework and file it in their folders. At the end of the term and the day of the final exam, all the students of the class 'Schreibfertigkeit I und II' had to hand this folder in. This folder was reviewed by the teacher one last time and taken into consideration for the final grades, which the students got back afterwards.

This study shows, that homework in the class 'Schreibfertigkeit I und II' has supported the students in their first year of study in several ways: it gave them the chance to study in areas outside of the classroom and to rethink and develop their new knowledge. It shows that the use of homework in the course 'Schreibfertigkeit I und II' develops the learning skills of the students, having a positive influence on their results in tests and exams.



In a questionnaire, the students had to give their opinion on homework. With some central questions, these questionnaires form the basis of this study on the topic homework. These questionnaires include information on the students' opinions on the quality of the given homework, motivation and doing homework.

The conclusion of this study emphasizes that no matter how old the learners are, homework should always be a part of the class, since it has a supporting function in class and also for the studying habits. Homework rises the motivation of the student, strengthens the newly acquired knowledge prepares for exams and supports the autonomy during studying.

Key Words: Foreign language education, writing skills, homework, writing, motivation



Use of Cloud-Based Translation Management Tools in Translation Education

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Translation tool developers have long been trying to automate translation process as much as possible in order to enable translators to produce high quality translations faster and at a lower cost. In addition, translation service providers are eager to grasp the solutions offered by the translation technology market. As a result, translators are made to adapt themselves to new technological trends in the market. Those who resist adopting current translation technologies mostly cannot take part in the translation projects that require use of specific technologies. Therefore, in today's translation market two of the most-sought after skills of translators could be technology-friendliness and flexibility to adapt changing technological requirements of changing translation situations. In this study, it is believed that cloud-based translation management systems can be a useful tool in helping translation students to develop such skills. The term 'cloud-based translation management system' can be defined as a translation management system where the translation memory system and all other resources for translation (glossaries, translation memories, styles sheets, etc.) are hosted on a remote server and can be accessed using a computer with Internet access. The translator who wants to use the system needs to create a user account. Any user (translator) with an account can log in the system and start translating without installing any specific software on his/her computer. The purpose of this study is to show what advantages using a cloud-based translation system in translation courses can offer. For this purpose, the author will make use of her own educational experience in a translation course named Translation of Specific Fields IV which is offered in the Department of Translation and Interpreting in English of Istanbul University. The course aims to introduce the field of information technologies (IT) and its terminology and help students gain translation experience in the field. Since IT translation goes hand in hand with the latest advances in translation technology, it was decided to use a cloud-based translation management system named MotaWord. The students created accounts on the system. In order to have their accounts activated, they had to attend a webinar on how to use the system and answer the questions of a survey sent to them by the trainers of MotaWord. After the activation of all accounts, the students were given a translation task which included 1) preparing a style sheet and a term list, 2) translation and 3) editing of some files about MotaWord. The files were provided by the developer company. During the translation process, all students used the same translation memory assigned to the project. In this practice, various advantages were observed. First of all, the students learned how to use a cloud-based translation management system by watching a webinar and they noticed that they did not need a teacher physically available to learn how to use a new technology. Secondly, the students could access the system from any location and any time they want and translate anywhere if Internet connection was available. They did not need to bring print-outs of their translations or their personal computers to the classroom in order to discuss their translation problems and decisions. They could easily sign in the system from their smart phones to see their translations. They could also see their peers' translations and experience collaborative translation since all students used the same translation memory during the translation process. The students used the system free of charge and the department did not have to make a big investment in order to adopt a new technology. In preparing the style sheet and term list, the



students had the chance to apply their theoretical knowledge in actual translation work. Some drawbacks were also observed. The students could not download their translations into their personal computers, only the teacher with an administrator account had the right to do so. As a result, since the advantages outweigh the drawbacks, using a cloud-based translation management system in translation courses is suggested in this study.

Keywords: Cloud-based translation tools, collaborative translation, educational tool, IT translation, translation education



The Relationship between Metacognitive Awareness of Reading Strategies and Success of Science of the 5th Grade Students in Secondary School

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Metacognition, the third component of information processing model, has an important place in learning process. Metacognition both controls and directs the cognitive processes like attention, perception, coding, renovation and restoration. Thus, they become skilled in learning domain by thinking about their work and they get autonomous thinking ability. (Oluk and Başçöncül, 2009)

Rising in metacognitive skills increases learning development, as well. It is also stated that students can increase their success level by learning how to be aware of self-thoughts in reading, writing and problem solving processes.

Metacognitive strategies provide one's awareness about their own reading processes. Metacognitive awareness of reading gives a chance to students on organizing their reading processes by easing their monitoring and controlling processes. In other words, student's following of reading process, his/her self-assessment in terms of the level of understanding about reading and the arrangement of the reading process in this direction, identifying deficiencies, if necessary, re-reading, can be considered as an indicator of his/her metacognitive awareness. (Çöğmen ve Saraçoğlu, 2010; Baker ve Brown, 1980).

The reason for the failure of the students is specially considered to be caused by the lack of progress in the reading comprehension skills (Oluk ve Başöncül, 2009). Therefore, the discovery of determination of metacognitive awareness in students' reading strategies has become important since the first years of secondary school stage.

In this study, the relationship between metacognitive awareness of reading strategies and success of science of 5th grade students in secondary school is aimed to reveal. In this sense, using levels of students' reading strategies, the relationship between these strategies and their success of science and also whether these strategies varies according to certain demographic characteristics is investigated.

Turkish version –adapted by Ozturk (2012)- of reading strategies scale which was originally developed by Mokhtari and Reichard (2002) was used for that purpose. 5 point likert scale consists of 30 items. The scale consists of three factors including General Reading, Problem Solving Based Reading Strategies and Supportive Reading Strategies. During validity and reliability studies of the scale made by Ozturk (2012), exploratory and confirmatory factor analysis and construct validity was analyzed. At the same time, reliability analyses were performed with Cronbach's alpha and coefficient of internal consistence. The correlation between the scale scores obtained from the Turkish and English forms were found to be 0.96. Factors of the scale was found to have reliability values between .76 and .85.



The study was conducted with the participation of 241 secondary school students in the 5th grade. The final grades of students in science classes were taken as a basis as a measure of success. In this study, methods of descriptive statistics including; frequency, percentage and averaging analysis, T-test, Anova and Scheffé tests for the detection of differences between independent variables and Pearson correlation analysis to determine the level and direction of the relationship between the two variables were performed.

As a result of analyses, it was seen that students have higher levels of metacognitive awareness in terms of Problem Solving-based Reading Strategy rather than General Reading Strategies and Supportive Reading Strategies. Students' metacognitive awareness of reading strategies were found to vary in favor of girls and moderate and meaningful relationships have been identified between their awareness and success in science classes.

Keywords: Reading strategies, general reading strategy, problem solving based reading strategy, supportive reading strategy, metacognitive awareness, science achievement, 5th grade students



Examining the Relationship between Teachers' Individual Innovativeness and Technology Acceptance Status

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Technology acceptance status of teachers is regarded as an important structure for teacher to use technology in effective way while teaching and learning. That investigation of technology acceptance status of teachers in terms of individual differences is suggested by the researchers in literature. In this context, that creating the relationship between the features of individual innovativeness and technology acceptance status is considered to be so essential. By means of study it has been aimed to search for the relationship between individual innovativeness and technology acceptance status. Within this framework, it has been revealed the association between individual innovativeness and technology acceptance status. Relational survey model was used in this research and it's a descriptive research. Relational survey model is used to identify the relationship between two or more variables and to gain insight into cause-effect relationships. The study group of research contains 115 female and 102 male, totally 217 teachers who works in different departments. In study group, 138 teachers are graduates, 79 teachers are postgraduates. Also, 102 of teachers work in state schools and 115 teachers work in private schools.

In the research, "Individual Innovativeness Scale" was used for stating teachers' individual innovational features. Its original form was developed by Hurt, Joseph and Cook (1977). The scale was translated into Turkish by Kılıçer and Odabaşı (2010). Individual innovativeness scale contains 12 positive and 8 negative items. While it was being translated into Turkish, it was seen that it had four factors "Resistance to change", "Opinion-leading", "Risk-taking" and "Openness to experience". Its variance explained for qualifications measurement has been analyzed. By the scale, innovativeness scores of attendees are calculated and attendees are categorized. If scores of attendees are between than 80, attendees are innovators; if scores of attendees between 69 and 80, attendees are early adopters; if scores of attendees between 57 and 68, attendees are early majority; if scores of attendees between 46 and 56, attendees are late majority; if scores of attendees are less than 46 points, attendees are laggards. Analysis of results, reliability coefficient for the entire scale is 0.82, "Resistance to change" factor regarding the reliability coefficient is 0.81, "Opinion-leading" factor regarding the reliability coefficient is 0.73, "Openness to experience" factor regarding the reliability coefficient is 0.77 and "Risk-taking" factor regarding the reliability coefficient is 0.62. As a result of this study, analysis of the data obtained in, Cronbach's alpha reliability coefficient for the entire scale is 0.89, the reliability coefficients of the factors respectively was calculated as 0.93, 0.90, 0.85 and 0.90. The teaching-learning process to determine the status of teachers in technology acceptance "Technology Acceptance Scale for Teachers" is used was developed by Ursavaş, Şahin ve Mcllroy (2014). This scale consists of 37 items within 11 factors. Scale items was collected under title of perceived usefulness (4 items), perceived ease of use (3 items), attitude towards use (4 items), behavioral intention (4 items), facilitating conditions (3 items), perceived entertainment (4 items), self-efficacy (3 items), technological complexity (3 items),



compatibility (3 items), anxiety (3 items) and subjective norms (3 items). In this study, all the factor loading figures range from 0.67 to 0.93. According to the result relating to Cronbach's alpha reliability coefficient, the lowest factor found is 0.80 with self- efficiency and the highest factor for perceived entertainment is 0.91. As a result of analysis of the data obtained Cronbach's alpha reliability coefficient for the entire scale is 0.96. The reliability coefficients of the factors respectively were calculated as 0.93, 0.94, 0.55, 0.82, 0.94, 0.87, 0.86, 0.95, 0.93 and 0.87. In the analysis of the data obtained, descriptive statistics, Pearson coefficient of correlation and Spearman's rank correlation coefficient were used.

As a consequence of the data obtained, according to individual innovation features, 19,4 percent of teachers are innovators, 37,8 percent of teachers are early adopters, 27,6 percent of teachers are early majority, 12,4 percent of teachers are late majority and 2,8 percent of teachers are laggards. Moreover, it has also been noticed that technology acceptance statuses of teachers were well. Basic correlation process defining whether there is a correlation among the features of individual innovativeness and technology acceptance status have shown that there is a correlation in a positive way, low and moderate levels and significant relationship between the features of individual innovativeness and technology acceptance status (p<0,01).

Keywords: Individual innovativeness, technology acceptance, teacher characteristics.



The Comparison of Evaluation of Concept Map and Structured Grid with Multiple-Choice Test

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Education is a concept that includes learning, training and assessment process. In education, process of learning and teaching is important and also the importance of assessment process is known. Not only cognitive abilities of the students but also the affective and psychomotor skills should be measured. "Doris emphasizes that the student activities should be examined from many angles to understand students' understanding of scientific concepts and using skills of them" (as cited in Korkmaz & Kaptan, 2005). Therefore new approaches are needed in the field of assessment and evaluation. Alternative assessment approaches are using for measurement and evaluation in addition to traditional approaches. Çalışkan and Kaşıkçı (2010) stated that, teachers use alternative assessment methods with traditional assessment methods. In a study conducted by Adana and Doğanay (2010) is reported that, teachers prefers traditional assessment methods more than alternative assessment methods beside they use rubrics, self and peer assessment, group assessment and checklist methods. Lots of technic, like concept map, structured grid, word association tests, portfolio and diagnostic tree can use for assessment. In this study, we used concept map and structured grid for an assessment technic and compared concept maps and structured points with multiple-choice test points. Relational scan method was conducted which is a quantitative research design. Sample consist of 28 sixth grade students who are studying at 2014-2015 academic year in a secondary school which has located in Samsun. In this study, "Electricity in Our Lives" unit considered by researchers and they prepared concept maps and structured grid which they related with the unit. Electric concept taken to center by researchers, resistance, conductive materials, insulating materials, solid conductive materials, liquid conductive materials, solid insulating materials, liquid insulating materials, length of the conductor, type of conductor, conductor cross-sectional area, ohm, bulb brightness, resistance measures concepts given at certain points according to the hierarchy and some circles given empty and we asked to fill in the gaps by students. Besides some relationships are shown by arrows and the words which are identifies the relationships are written upon to arrows in the concept map. Also some relationships shown with arrows but they don't have words which are identifies the relationships and we asked to write that words by students in concept map. Apart from that, we wanted examples for solid conductive materials, liquid conductive materials, solid insulating materials, liquid insulating materials from the students in concept map. The structured grid formed with 20 concepts which are students need to learn. Those concepts placed to boxes in a mixed manner. In this structured grid, we asked 4 questions and their answers in boxes. Beside we asked another question and we wanted from students to create a



simple circuit diagram with using the required concepts which are they in boxes. At the end of the unit, the concept map and structured grid applied with multiple-choice test prepared by Ceylan (2008). Structured grid and concept map evaluated by two researchers blinded to one another. The evaluation phase scores were compared and an evaluation phase of concept map is done according to Bahar, Nartgün, Durmuş and Bıçak (2006)'s criteria. Examples and links in concept map were scored one point, hierarchies were 5 points and cross-links were scored 10 points. The evaluation phase of structured grid is done according to Johnstone, Bahar and Hansel (2000)'s formula. The results will be present.

Keywords: Concept map, alternative assessment techniques, multiple-choice test, structured grid



Social Studies Teacher Candidates' Opinion, Attitudes and Awareness Levels about Using Mathematics

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We live in an age that the information increases exponentially and develops intensively, constantly with the parallel to occuring rapid development in science and technology. Today's information age for the future of the development targeted communities mathematics plays an important role. Today, for the breadth of applications scopes mathematics is used as an indispensable resource for all sciences. There are not any scientific areas where almost mathematics is not used. Mathematics is not only a basic tool of modern science and technology; but also in medical, social, political, economic, business and management departments Mathematical methods are used in a great extent. (Çoban, 2002)

Each area in education carries a feature that different disciplines are taken together with multidisciplinary and interdisciplinary. This relationship for the use of common or similar concepts or for teaching them, for the simultaneously development of elementary social studies and mathematics is very important for increasing the efficiency and effectiveness of academic and educational Studies. (Çeken, R., & Ayas, C. 2010).

In Education Faculties Teacher candidates have many lessons during the training process. On the various subject areas of the course are taught to social sciences teachers. In these lessons in awareness for the use of mathematical knowledge in mathematics-related issues social sciences teacher candidates' perceptions to themselves and the lesson become very important. Social Sciences Teacher Training Department has students who graduate from high school in the verbal sections and students who enter the University exam (LYS) from verbal section.

In this research, it was aimed to determine the levels of attitudes, opinion and awareness of usage on mathematics that social sciences teacher candidates' considering graduation from the verbal portion courses. For this purpose qualitative research method was used in scientific research methods. Qualitative research method answers the meaning in the social experience and how that occurs. (Denzin and Lincoln, 2003). So that in qualitative researches to be able to concentrate on the subject and to gain a better sense of issue the asked questions are flexible and may vary according to the research process. In this case it is useful in-depth understanding of participants' research experiences, reactions and comments. (Creswell, 2003).

In this study fact science pattern is used in qualitative research patterns. Fact science focuses on the facts which are having awareness but not having in-depth and detailed understanding (Çepni, 2005).

As data collection method semi-structured interview technique was used which was prepared by researchers and validation study was completed.



The study sample was generated by a total of 15 people consisting 5 from each classes of 2nd, 3rd and 4th in Amasya University Faculty of Education Social Studies Education. For the analysis of the interviews NVivo software was used.

Using data obtained from the study Social Sciences teacher candidates' views, attitudes and awareness levels on the use of mathematics in undergraduate courses will be examined, and their attitudes towards mathematics will be discussed.

Keywords: Social sciences, use of mathematics, teacher candidates



Health Beliefs of University Students With Regard To Sportive Recreational Activities: The Case of Batman and Gümüşhane Universities

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Health is becoming more important to consumers now more than ever. Consumers are becoming increasingly active and informed when it comes to health. There is an increase in recreational activities that are dedicated to providing only healthy living, dairy, and activities. Nowadays, human needs the recreational activities to carry out the standart of living healthy. In particular, people living in big cities have greater need to recreational activities. Air pollution, traffic problems, destruction of natural areas, high population growth in urban areas causes necessitate the environment where people can benefit in several ways from social, cultural and physiological sights.

Health Belief Model (HBM) as a conceptual formulation for understanding why individuals did or did not engage in a wide variety of health-related actions, and provided considerable support for the model (Janz & Becker, 1984 p. 1). The Health Belief Model (HBM) hypothesizes that health-related action depends upon the simultaneous occurrence of three classes of factors: (1) The existence of sufficient motivation (or health concern) to make health issues salient or relevant. (2) The belief that one is susceptible (vulnerable) to a serious health problem or to the sequelae of that illness or condition. This is often termed perceived threat. (3) The belief that following a particular health recommendation would be beneficial in reducing the perceived threat, and at a subjectively-acceptable cost. Cost refers to perceived barriers that must be overcome in order to follow the health recommendation; it includes, but is not restricted to, financial outlays (Rosenstock, Strecher & Becker, 1988, p. 177).

The universe of the research comprise of Gumushane and Batman University prep, first and second grade graduate students. Students was chosen from theology and sport depatments. The reason is that to find out difficulties of theology background students and sports background students according to their beliefs on recreational activities. Because concept of belief has different perception and practice in theological system. The questionnaire has been implemented between February-May 2015. The sample was delivered 229 questionnaire form. 190 of them have been fully answered. There are 9 demographic questions and 21 field questions with 5 likert scale. The scale before was used Ertüzün's (2013) dissertation. There have been 5 subdimensions of 21 questions. These are "perceived severity" 4 questions; "perceived barriers" 3 questions; "physcial benefits" 4 questions; "psychosocial benefits" 6 questions and "self-efficacy" 4 questions. The results of the study may not be generalized for students at universities.

The aim of this study is based on investigating the link between health beliefs and health decision-making using the application of Health Belief Scale on Sportive Recreational Activities. The data have been collected from 190 volunteer students which study Sports and Theology at University of Batman and Gumushane. The data have been examined using by Independent Samples t-test and One way Anova. Student perceptions regarding "Perceived



Severity have been high. Regarding "Psychosocial Benefits" and "Self-Efficacy" sub-factors, there is a significant difference (p<0,05) between perception levels of theology students and perception levels of sports students.

Regarding "Psychosocial Benefits" and "Self-Efficacy" sub-factors, it seems there is a significant difference (p<0,05) between perception levels of students participating in activities and perception levels of students non-participating in activities. According to recreational preference of the students there is no significant differences between sub-factors and student perceptions. Regarding "Psychosocial Benefits" and "Self-Efficacy" sub-factors, it seems there is a significant difference (p<0,05) between perception levels of theology students and perception levels of sports students. Regarding "Physical Benefits" sub-factor, it seems there is a significant difference (p<0,05) between perception of students according to their grade.

The findings of the study will provide a viewpoint on recreation and health. Also practicians can also benefit from the study to design their recreational facilities in tourism industry for young people and their religious beliefs. This research has not covered AIO (attitude, interest, opinion) broadly due to time and access limitations. Future researches may be focused on these variables. Also religious sense of people may be compared to sports and recreational activities in future researches.

Keywords: Health beliefs, sportive recreation, university students, tourism, marketing



Students' Attitude towards Edmodo as a Supplementary Tool for Higher Education

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Today the number of universities equipped with learning management system is increasing, however its potential cannot be used as it was intended. Edmodo is one of the learning management system that can be used to support social aspect of learning. Also, effective use of Edmodo like learning management systems need to be studied over more to better integration of this tool.Recognizing attitudes of the students towards web based instruction in a university ensure quality and success of ICT implementation. Planning should begin with the awareness and readiness of users of that technology. Students' attitudes and motivations toward these technologies and their usage play critical role to diffuse these technologies into educational settings. Understanding their attitudes and the reasons of avoidance provide us to present solutions. For this reason, opinions and expectations of these active users of this technology is very important. However, there is still limited research on the impact of using social learning environment as supplementary tools for learning in higher education. The purpose of this study was to investigate what the students' attitude towards Edmodo learning management system and to determine its accomplishment. The researchers used case study as a research method. The guiding questions were:

- What are students attitude towards Edmodo supported computer course?
- What are the accomplishments of using Edmodo?

Fifty college students in an "Introduction to Computer" course for pre-service teachers participated in the study. The author collected data through questionnaire and interviews. "Web-Based Instruction Attitudes Scale" were conducted to see students' attitude toward web-based instruction. Originally, it was developed by Erdogan, Bayram, and Deniz (2007) in Turkish. It is 5-level likert type questionnaire from "totally disagree" to "totally agree". The questionnaire contained items about "effectiveness of web-based instruction" and "resistance to web-based instruction". The reliability coefficient alpha value was calculated as 0.917 by Erdogan, Bayram, and Deniz (2007). Interview were used to increase in depth understanding about students' attitude and accomplishment of using Edmodo as a supplementary tool.

The results of these quantitative data collected via attitude questionnaire revealed that Edmodo is a good tool to improve students' learning through active participation and communication. Furthermore, the majority of the students stated that Edmodo is a good learning tool to support face-to-face learning environment. At the end of the delivery of the course, students view on effectiveness of Edmodo was between neutral and agree, and resistance of Edmodo was between neutral and disagree. In addition, students' perceptions about new learning environment represented that their perceptions was over neutral. The reason of this existing situation was somehow related to the low computer competency level, limited Internet access at home, and limited computer ownership of the students. However, there are also some disadvantages using Edmodo such as time consuming, difficulty in following the procedures of Edmodo. This situation shows that although technology changes traditional habits in instruction, students existing computer competency level cause obstacles in using this kind of tools. Study showed that all students want online access for course content, while they are not tending to online courses. They want to be active in classroom and



they want to develop a warm relationship with instructors by means of this kind of learning management tools. Communication is a key word to activate and motivate students. Students have a positive view and have some expectations from technology.

Keywords: technology enhanced learning; case study; Edmodo; learning management system.



The Effects of Scratch on Six-Grade Students' Algorithm and Problem Solving Skills

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Scratch is a visual programming environment which aim to sustain programming education through self-directed and collaborative approach (Maloney, Resnick, , Rusk, , Silverman, & Eastmond, 2010). Earlier studies showed that using of Scrath has positive effects that contributes on mathematical thinking, solving problem skills, logic and analytical thinking (Calder, 2010). Furthermore, Kaučič & Asič (2011) Study indicated that using scrath improves problem solving skills and algorithms. In these studies ,many of students say that using scrath is simple and enjoyable. The aim of this paper is to explore the effects of scrath application on algorithms and problem solving skills of sixth-grade students taking information technology course. In order to achive this aim an is quantitative research was conducted. Experiment pattern on control group is built with pre-test and final-test. Participants of the study was 68 Six-grade students from a public primary school in Kastamonu-Taşköprü. The research is designed as half-experimental. Control group was consisted of 35 and experimental group of 33 students . Improving Algorithm Test and Problem Solving Survey which is designed by Serin for primary students is applied whole groups as pre and post-test. Problem solving survey is advanced to determine levels of problem solving skills and self perception. Factors, validity and reliability analysis are realized for survey as measurement object. Serin's (2010) Problem Solving Inventory contains 3 factors and 24 item which are defined one by one. Statistically significance of Analysis was determined with Cronbach Alpha value that is 0.80. 4 open-ended questions are asked students to defining their levels of improving algorithm. Questions are prepared in order with topics that are improving algorithm, improving flowcharts, defining algorithm and findind misspecified section of algorithm. These questions were investigated by 3 specialist and were regulated if necessary.

In this study, both control and experimental groups had algorithm education during 6-weeks period in information technology course. First week, operators and flowcharts figures were introduced to control and experimental groups. Following weeks algorithms and flowcharts were teated in line to simple models to more complex ones. At the last week of study, especially defective algorithms and flowcharts are presented students to find wrong parts. Concerently, it was provided experimental group to access Scratch environment one more hour at the first week in addition to information technology course. Along this one hour extra education time, students are informed with contained examples by https://scratch.mit.edu/ what to do with scratch program. During this hours scratch Operators were explained and examples are demonstrated as algorithms at the blackboard. Students had chance to complete examples in scratch which was drawn to blackboard. As an example cat character moves forward 10 steps ahead, then says hello and rotates 90 angles to clockwise. This example was solved as an algorithm and flowchart at the blackboard. Following weeks, experimental group students completed similar applications on this environment. In order to investigate, the results of algoritm and problem solving skills test of experimental and control group Mann



whitney u test conducted. Wilcoxon test is applicated pre-test and final test with intragroup results in surveys to be compared. Also Mann whitney u test is applied to explore if there is a difference by gender at or not.

The pre test results showed that there is no statistical significance between experimental and control groups (U=467,500 p>,05). Post test results also showed that there is no statistical significance between groups (U=433,500 p>,05). The pre test results of Solving Problem Survey by checking Mann whitney test shows (U=411,500 p>,05) that there is no statistical significance between experimental and control groups. In the same way, final test results are shows that there is no statistical significance between groups (U=488,500 p>,05).

In the literature, there are many studies asserted that programming education has a effect on improve problem solving skill(Çetin, 2012; Genç & Tinmaz; Calder,2010). In their study Genç and Tınmaz(2015) conclude that they could not find a correlation between programming education and problem solving skills. Our study supported this result. As an opposite opinion, Çetin (2012) and Calder (2010) find a relation between programming education and solving problem skill.

Keywords: scratch, programming education, problem solving skill, visual programming



Computer Aided Analysis of Multiple Choice Test Results

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Assessment and evaluation process is very important in order to understand the success of teaching activities. Evaluations made during teaching process can provide feedback, which can increase teaching efficiency by determining learning deficiencies and failing points in the process. At the end of the teaching process, assessment can be used to learn, if there has been a change in knowledge of students. At the end of the teaching process, evaluation can be used to judge whether the program or instruction has met its intended learning outcomes.

One of the most widely used assessment technique in educational institutions is the multiple-choice tests. In Turkey these tests are widely used in schools and also Student Selection and Placement Center (OSYM) and Ministry of National Education use these tests in nationwide exams.

Several analyses has to be made in order to determine the validity and reliability of these multiple-choice tests and items in the test. In order to make some comments about multiple choice tests, test's average, test's reliability, mean difficulty, standard deviance, measures of central tendency, measures of central distribution should be computed. And also to make some comments about multiple choice tests' items, Item Difficulty index, Item Discrimination Index, item variance and standard deviance, item reliability index should be computed.

These computations are time-consuming and hard to do by hand. Also even if data may be entered in a spreadsheet, formulas can be hard for a teacher to form in the software. To make comments about the produced values is also a hard point for educators. As a result teachers in educational systems don't/can't do evaluations about the assessment systems.

In this study, a software has been developed for the statistical evaluation of multiple-choice tests' results. This software is developed in C#, one of the programming languages which is used quite a lot in recent years. In this software, multiple choice exams which were previously applied and results had been saved to computer, can be analyzed.

With this software, test and item analysis of the multiple-choice exam can be done separately, and also statistical results can be presented to the user by colorized graphics. In addition, user can produce and save reports of analyses to evaluate later.

In the main window of the software there is five tabs (Giriş, Ayarlar, Test Analizi, Madde Analizi Grup, Madde Analizi Tüm – Input, Settings, Test Analysis, Item Analysis Group, Item Analysis All). In analyzing process exam data must be entered to the software. In order to easily enter data, data must in a text file which consists of rows which must include student number and student's response to the questions. Afterwards items which will be examined in the process can be chosen or all of the items can be used.



Examinees' scores, frequency table and analyses about the test (range, mean, median, Kr20, test's mean difficulty, standard deviance, variance, coefficient of variation, and coefficient of skewness) can be seen in "test analysis" tab.

Every item's Item Difficulty index, Item Discrimination Index, item variance and standard deviance, item reliability index, Point-Biserial Correlations can be seen in "Madde Analizi Grup – Item Analysis Group" tab. And also distracters can also be seen easily in the graphics section of this tab. But computations in this tab are made using the data of the 27% of the students at the top and the 27% at the bottom according to their total score.

In "Madde Analizi Tüm – Item Analysis All" tab, the computations which are made by using all of the examinees' data can be seen.

Also there is an info box in this developed software. The info box shows several information about the computed properties and their values. This box can be helpful for users who have limited information about these statistics.

With this software educators can easily produce statistical information and detailed item analysis about the multiple choice tests' they used. With this info they can easily see the accuracy of the assessment and evaluation processes.

Keywords: test analysis, item analysis. assessment and evaluation, multiple choice tests



Determination of Computer and Instructional Technologies Education Teacher Candidates' Hope for the Future: A Qualitative Research

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Because of the unemployment problem, teacher candidates' hopelessness and future expectations have great importance not only in our country, Turkey but also many countries around the world. Teacher candidates' perspectives for their profession and their future have been altering in our ever-changing world. Recently, there is a bunch of news about teacher hiring. According to this news, teacher hiring is one of the most important educational problems in Turkey. Worse, this problem has been more dramatical than before as time goes by. When the literature has been examined, there are some studies that focus on this serious problem. For instance, Ceyhan has conducted a study in 2004 and found that some teacher candidates have negative opinions about the future. In a similar vein, Tümkaya, Aybek and Celik (2007) have found that teacher candidates have negative thoughts about their hiring. As a result, teacher candidates are hopelessness for their future career. Because of these negative opinions and hopelessness, teacher candidates do not care about their academic achievement and tend to find some other occupations (Ceyhan, 2004; Karataş & Güleş, 2013; Sezgin & Duran, 2011). The purpose of this current study is threefold: 1) to better understand the hopelessness topics of teacher candidates, 2) what kind of expectations they have for the future, and 3) what can be done to meet these determined expectations. In order to reach the aim of this study, the researchers address the following research questions: 1) What are the hopelessness topics of Computer and Instructional Technologies Education Teacher Candidates?, 2) What are the expectations of Computer and Instructional Technologies Education Teacher Candidates?, and 3) what can be done to meet these determined expectations of Computer and Instructional Technologies Education Teacher Candidates? The researchers have employed a phenomenological study, which is a kind of qualitative research approach.. Çepni (2010) has stated, "Relationships between individuals and what his try to learn can attempt to understand and explain with phenomenographic method" (s.104). The population of this study consists of teacher candidates at the department of Computer and Instructional Technologies Education, College of Education, Amasya University. The sample of this study includes 16 teacher candidates (8 women and 8 men) who have been pursuing their education at the department of Computer and Instructional Technologies Education, College of Education, Amasya University in 2014-2015 academic year. The researchers have purposefully selected the participants of this study. By doing so, the researchers have gathered the data about the participant teacher candidates' first-hand experience with their education. The researchers have created a semi-structured interview form. As mentioned by Patten (2010), "Some questions will be developed in advance with follow-up questions on the spotlight of participants' responses" (p.77). Before starting interviews, the researchers have showed the interview form to teacher candidates and asked them to get their permission for recording. After that, the researchers have carried out semi-structured interviews with these selected teacher candidates. Each interview lasted around 40 minutes, was recorded and



transcribed. Then, the researchers have used NVIVO program to analyze all collected data. After analyzing the collected data, the researchers have found that the participant teacher candidates have hopelessness about fear of failure of hiring, lack of given value to the teachers, and lack of importance to their department. The researchers have also found that the participant teacher candidates have high-level expectations regarding hiring and want to be more useful for the future. The participant teacher candidates have mentioned that their expectations can meet if they work very hard, hiring of teachers increases, and education system changes. By the end of this study, the researchers have some suggestions. In the teacher hiring process, the number of teachers on Computer and Instructional Technologies Education should be increased. By doing so, teachers can be more hopeful for their future career. Also, examination system of teacher selection should be altered and renewed.

Keywords: Computer and instructional technologies education, teacher education, teacher candidates, hopelessness, future expectations



Augmented Reality and Its Reflections on Education in Turkey

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Augmented reality (AR) is a technology which renders virtual world in its own boundaries and provide interaction between virtual world and real world. Augmented reality technologies take much more crucial role in our lives by means of its ability to supply users with rich interaction capabilities within environment which is missing in virtual worlds. Military, advertisement and entertainment industries are main fields that AR is widely used. AR applications are also commonly used by mobile devices which are gradually taking more part in daily life. As a result of these technological improvements, education also becomes a field in which augmented reality technologies are utilized.

Despite its all positive aspects, there is contradiction in terms related to AR technology in Turkish literature. In order to describe the technology, the word "artırılmış" is used in some studies (Abdüsselam & Karal, 2012; İbili, 2013; İbili & Şahin, 2015; Köroğlu, 2012; Köse, Koç & Yücesoy, 2015; Tuğtekin, 2014; Tülü & Yılmaz, 2012) while "genişletilmiş" word also is used in some studies (Orhan & Karaman, 2011; Özarslan, 2011; 2013). Before expression of current state and potential benefits of AR, it should be better to dispel apparent contradiction in terms related to AR. In this context, at the beginning contradiction about AR is stated and current state is described. In the literature the word "artırılmış" is more commonly used than "genişletilmiş" but the latter is also an appropiate choice. Furthermore it is believed that a consensus related to this concept should be provided.

In this study, brief history of AR is presented before proceeding to its educational utilization. Improvements related to AR starts with Heilig's Sensorama Device (Heilig, 1962), gains momentum with Head-Mounted Display (HDM) developed by Sutherland in 1968 and continues to grow with Zimmermann's Virtaul Glove in 1977 (Caudell & Mizell, 1992). In recent years, virtual characters get into our houses by the help of AR implementations in movies. In addition, digital game industry also uses AR applications. Today so many AR utilizations like mobile applications, advertisements and statistic displays in sports competitions, Microsoft Hololens and Google Glass projects depict potentials of AR technology.

It is widely accepted that first AR application in education is an inservice training set up in 1992 by an airplane company. In this training, education is delivered to workers by using head up displays. In following years, AR is used in printed materials for illustration purposes (Johnson & Witchey, 2011). By means of improvements in mobile technologies, several AR applications and tools are created to develop AR applications are provided to developers. In addition, potential of AR technologies is examined by project groups like Wisconsin University Augmented Reality and Interactive Story Telling Group and Radford Outdoor Augmented Reality Project (Dunleavy & Dede, 2014).



In this study document analysis method was used to gather data. Document analysis is a systematic procedure for reviewing or evaluating both printed and electronic documents (Bowen, 2009). The words "artırılmış gerçeklik" and "genişletilmiş gerçeklik" were searched in Google Scholar and Turkish Council of Higher Education Thesis Center databases. In addition, studies conducted by Turkish academicians were searched in ScienceDirect database.

Studies related to AR in Turkey start in 2012. Some of these studies focus on application development environments like ARGE3D, UFUXAR (İbili, 2013; Tuğtekin, 2014) while contribution of AR to lesson effectiveness (Köse et al., 2015) and students opinions related to AR are examined in other studies (Uluyol & Eryılmaz, 2014). Even though there is an increase in AR related studies in the Turkish literature, there is not a single study which examines studies conducted related to AR technology and its potentials in educational context. Therefore, aim of this study is to fill this gap in the literature by considering the studies conducted in education while focusing on the current state of AR in education. Suggestions about the potential benefits of AR technology in the field are also presented to the readers. Additionally, it is believed further studies and applications can contribute to both to the field and to different future projects like FATİH Project which has significant goals in education in Turkey.

Keywords: augmented reality, augmented reality in education, augmented reality in Turkey



Teachers' Opinions about Intelligent Tutoring System Prepared For Improving Problem Solving Skills of Students

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The plenary aim of mathematics education is to bring in mathematical knowledge and skills that are required by daily life to the individual, to teach him problem solving and to bring in him a way of thinking that handles incidents including problem solving approach. For this reason, problem solving skills take important place among the mathematical skills. That problem solving keeps an important place in the overall objectives of mathematics course has carried this issue to the center of mathematics curriculum at multiple levels from primary school. Indeed, NCTM standards, as well, indicate that problem solving skills are needed to be primarily in mathematics teaching (NCTM, 2000). For the solution process of problems Polya (1957) recommends a framework that contains the stages of understanding the problem, selecting a strategy for the solution, the implementation of the strategy and the evaluation of the solution.

Within this framework in many studies students are indicated to encounter a number of difficulties in understanding the concepts that problems include and the relationships between the concepts while they are solving problems. According to Polya, one of the most important causes of these difficulties is that students do not perceive problem solving as a gradual process. This opinion is supported by some studies. Therefore, mathematics educators have a consensus on developing students' problem-solving skills and on issue that education should be prior aim. For this reason, problem and the structure of problem solving, and increasing the success in problem solving is an issue studied by many educators and psychologists.

In addition to many teaching methods, applications using computer technologies keep an important role in these studies. By the support of educational software, students can spend less effort to understand the subject and they can focus only on the objectives. In the problem solving process, it is not easy for the software to solve problems including all of the possible alternatives of the problem context. Thus, modeling of the problems is important for developing software which solves various kinds of problems in the context. In this sense, students should gain basic problem solving skills by endeavoring with alternative solution ways of problems. The traditional computer based learning environments (CBLE) will not be sufficient for providing all alternative solutions. In addition, CBLE is inadequate for comparing students' solutions step by step with possible correct solutions. In this case, computer scientists suggest intelligent tutoring systems (ITS) that can analyze problems and provide alternative solutions. The purpose of this study is to evaluate the intelligent tutoring system called as ARTIMAT, which has been prepared in order to improve mathematical problem solving skills of the students.

The purpose of this study is evaluate to ARTIMAT with the opinions of teachers in terms of contribution to problem solving skills and academic achievements of the students.



In this study case study design which is one of the qualitative research methods was adopted. The implementation, which was conducted in order to evaluate the system, has been performed with 5 teachers in an Anatolian High School. ARTIMAT system has been implemented for three weeks for two hours in each week in computer lab and in a way that each teacher has used his/her own computer. Data was collected administering a questionnaire contained open-ended questions. Descriptive analyses technique was administered on the collected data. In this study presents findings and results of the interviews collected from the participant teachers.

Keywords: Intelligent Tutoring Systems, problem solving, Polya

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Study of Determining the Criteria for Fetemm

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Societies can survive in the intense competition environment by the products and technologies that make a difference. Rapid advances in economics, technology and education bring new research fields. Educational programs established by the institutions make difficult to access to the the targets with desired levels in terms of time and performance. In this direction, especially science, technology, engineering and mathematics fields and novelties which are based on the interaction of these areas have emerged. With the progress which is known as FeTeMM in the Turkish literature and STEM (Science-Technology-Engineering-Mathematics) in the international literature, opportunity arises to route the student responsibility to the specific areas and develop in these areas.

It is a fact that today differences between the learning styles acquire a new dimension. Efforts for the innovation in the learning environments and effectiveness of these environments gradually gain importance. It is difficult to make sense of the different disciplines of knowledge with a limited capacity. Thus the effects of the advanced level education in the frame of specific program in the focus fields arouse curiosity. FeTeMM, as a narrow-scoped education model, determine the limits of educational goals and feature the interaction of the respective areas.

FeTeMM which is called STEM in the international literature is based on maintaining the economic and technological power. Instead of learning the whole curriculum as seen in many educational model, specialization of learning is provided to the learners. The design of the learning environment at an early age as determined in accordance with the training of teachers and learners will be able to guide the effective use of this medium has become necessity (Corlu, 2014).

FeTeMM fields consist of four main areas (Science, Technology, Engineering and Mathematics). One of areas is obvious and other areas can be implanted in it. Even tough whole areas take place in the process, the effective and collocation usage of at least two areas can provide desired processes (Riechert & Post, 2010). Yamak, Bulut and Dündar (2014) indicate that the education provided by the FeTeMM provides a positive effect on the attitude of the relevant course.

The aim of this study is to clarify the term of FeTeMM and express the acquirements of the interaction of FeTeMM areas build upon literature review. In this context, the study begins with description of the term FeTeMM. Then, importance of FeTeMM which provide scholars to combine different areas are adressed. In addition, scope of the FeTeMM is discussed through literature review. Suggestions about graduate education programs and activities will be presented as well.

Keywords: FeTeMM, STEM, innovation



Distance Education Research Trends In Thesis and Dissertations Conducted Within Turkish Universities in the Last Decade

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Distance education has become so popular in Turkey that distance education programs and research and practice centers within the universities are increasing considerably and huge investments have been made in this field. However, it does not guarantee success in distance education to create showy centers or to use high-quality software and hardware technologies. Gunawardena and McIsaac (2003) suggests programmatic research for the success of distance education as well as other significant factors. The exemplary distance education practices in the world clearly show that a powerful research base is essential for the accomplishment in this regard. In parallel with the increase in the practices, a great deal of research documentation about distance education have been produced as a result of its growing nature in Turkey. Critical Analysis of this research documentation will definitely provide the researchers with the understanding of the research gaps, improvement of the current practices, and the development of the innovative contexts, methods, designs, and technologies through programmatic research studies as suggested by Gunawardena and McIsaac (2003). Thesis and dissertations conducted within the universities might play a central role in revealing the distance education research trends in Turkey. Therefore, the purpose of this study is to investigate the research trends in the thesis and dissertations with respect to distance education conducted within Turkish universities in the last decade.

The current study used content analysis to review, analyse, and integrate the thesis and dissertations in distance education. As a basic inclusion and exclusion criteria, the thesis and dissertations conducted between 2005 and 2015 were included and the rest were excluded within the study so as to capture the hot research topics in the field. Additionally, since the focus of the study is on the pedagogical aspects of distance education, the thesis and dissertations that reported the development and use of software for distance education within the engineering framework were excluded in this study. The data were collected through a literature search on the "Thesis and Dissertations Database" of Higher Education Council (HEC) of Turkey, which stores all thesis and dissertations conducted within Turkish Universities. "Distance Education" were used as the keyword for database search. The data were analysed through Descriptive statistics and Constant Comparative Analysis, which was proposed by Glaser (1965), to compare and contrast the research topics covered by the reviewed thesis and dissertations.

The results are presented and explained as descriptive statistics and qualitative results. 142 Thesis and dissertations conducted in various disciplines within 37 public and private Turkish universities were reviewed within the current study. 83.1% of them (N=118) are master's

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thesis and 16.9% of them are doctoral dissertation. The participants of these studies are elementary and secondary grade students with 5.6% (N=8), associate degree students with 13.4% (N=19), bachelor's degree students with 29.6% (N=42), graduate students with 2.1% (N=3), instructors with 8.5% (N=12), occupational groups with 7.0% (N=10), students in special education with 2.8% (N=4), parents with 1.4% (N=2), distance education staff with 16.9% (N=24), undergraduate and graduate students with 3.5% (N=5), undergraduate students and instructors with 3.5% (N=5), and the other groups with 1.4% (N=2). It is also revealed that 4.2% of these studies (N=6) did not reported their participants. The themes extracted from the included studies that indicate their research topics are usability with 10.9% (N=17), participants views with 23,7% (N=37), system characteristics with 12,8% (N=20), educational programs with 9.0% (N=9), problems with 3,9% (N=6), learning with 18,6% (N=29), measurement and evaluation with 3,9% (N=6), motivation with 3,2% (N=5), interaction with 2,6% (N=4), comparison of distance and traditional education with 2,7% (N=4), technology acceptance with 0,6% (N=1), social aspects with 2,6% (N=4), and the others with 9,0% (N=14).

The results of this study revealed that most of the studies were conducted with the participation of undergraduate students and there is a need for the studies with the participation of graduate students considering the number of the graduate programs at a distance in Turkey. In addition, the mostly studied research problems are participant views and learning; and there is requirement for further research in technology acceptance in distance education settings. The results are discussed in detail by comparing and contrasting based on the related literature and the recommendations are offered for the future studies.

Keywords: Distance Education, Research Trends, Thesis and Dissertations, Turkish Universities



Examination of Pre-Service Science Teachers' Reasoning Patterns in Genetics Literacy Issues: A Turkish Perspective

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Technological innovations have been developing day by day. With the increasing impact of technology, newly introduced terminologies like gene therapy, cloning, stem cell research or genetically modified foods have been introduced to daily life context. Everyday, individuals are exposed to these new terminologies via television, internet or newspapers. Even there is no consensus on the definition of genetics literacy, it primarily focuses on the sufficient knowledge in genetics as well as making informed decisions regarding these issues. This study was designed in a qualitative approach. In this paper, I focused on two cases about genetics literacy and collected data from seven junior pre-service science teachers who had completed courses about biology, genetics and genetics and biotechnology via semistructured interviews. The interviews were recorded based on the participants' willingness and transcribed. The data was analyzed by using constant cooperative method by using open coding procedure. A coding book was prepared and used in the study during analysis process. Each interview protocol consisted of scenarios with fictional characters. The first interview protocol consisted of basic information about Cystic Fibrosis which is an autosomal recessive disorder and the second case included information about Huntington Disease which is autosomal dominant disorder. The participants were asked whether the possibility of offspring's having the disorders in order to assess they have required basic knowledge about recessive-dominant traits and inheritance patterns of autosomal recessive and dominant genes in first phase. In second phase of interview protocols, they were asked what pre-service science teachers think about the status of embryos and how they would decide about embryos which included some ethical dilemmas in order to examine the factors that influence their decision making processes. The results revealed even prospective teachers had courses about genetics topics, they had relatively limited knowledge about how autosomal recessive and dominant genes will be inherited to the offspring. They had misconceptions about the inheritance patterns of autosomal recessive and dominant genes. Another finding was that prospective teachers believed the importance of having genetic tests before making any decision about the status of embryos. As both of scenarios included ethical dilemmas about aborting the fetus because of carrier status of dominant or recessive disorders, teachers made some decisions about the fetus. While making decisions, they were influences by a number of factors. They used rationalistic, emotive and intuitive reasoning patterns (Sadler & Zeidler, 2004) while making decisions and supporting their positions. While making rationalistic decisions, they used a variety of patterns such as patients' rights, parents' rights and responsibilities as well as the possible treatment options. On the other hand, while making emotive decisions, they used empathy or sympathy towards fictional characters. Lastly, they used "gut-level" reactions to scenarios and did not necessarily explained their reasons while making decisions. Overall, the study indicated that prospective teachers had some constraints in initial application of their genetics knowledge into issues regarding genetics literacy and used a variety of reasoning patterns in making decisions. As this study is qualitative in nature, I do not generalize to my findings to a proper universe. Instead, I tried to explain some inefficiencies about prospective teachers' genetics knowledge as well as their reasoning patterns.

Key Words: pre-service teachers, genetics literacy, decision-making strategies, genetics



Metaphors of 4th Grade Students about Organs

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In science education prior knowledge of students is very important. Learning by metaphors is a way of teaching new information by using prior information. Metaphors can be used to form meaningful relationship between prior knowledge and new information.

Metaphor is one of the effective cognitive mechanisms by which people can infer and learn new concepts. Metaphors play an important role on learning and developing new cognitive ideas and concepts. They are powerful learning and teaching tools. Retention can be better when powerful connections were established between new information and prior information. One of the important aspect of metaphors as a teaching tool is that they have a positive effect on long time retention of new information by using old information. To use and direct this effect to contribute students learning process, it is important to determine which metaphors are used by students about the learning subjects. In this context it is important to know students metaphors.

The aim of this research is to determine metaphors of 4th grade students about some of the organs which they come across in science courses. By learning these metaphors it can be stated that how students observe organs and why they observe like that. Thus problems in the process of concept teaching and what needed to be done can be identified. Also some ideas about using the proper tools and equipment and making correct similes in teaching process can be produced.

The research's sample consisted of a total of 215 students (108 girls and 107 boys) whom are 4th grade student and studies at Afyonkarahisar city center.

In order to determine students' ideas about organs in circulatory and respiratory systems, according to expert opinions a data collection tool which had 7 questions has been developed and has been used. The data collection tool contains concepts which has been taught in science courses. Concepts has been chosen by considering Ministry of Education's primary school Science courses' units and limitations. Tool has been used after a pre study which has carried out with a group of 30 students.

In order to define students' ideas about organs, it is asked to all of the students to complete sentences like "Hearth looks like, because", "Blood looks like, because". The students were asked to write their thoughts by concentrating on the organs which were on the questionnaire page. Students' answers were the main source of this research.



In order to analyze data, content analysis method was used. In content analysis, the main aim is to determine the relationship and concepts which can explain the data. In content analysis, data which resemble each other are brought together in some themes and concepts. These concepts are organized and interpreted in a way which can be understood by readers.

Data were descripted by frequency analysis. The students were categorized by their gender. At first, metaphors which were used by students were numbered and ordered. Questionnaires which had no metaphors, had metaphors more than one and empty were omitted from analyze process. Finding which were determined by content analysis were presented and explained in tables.

In metaphors about hearth, most of the students liken hearth to some objects for its functions. This can be observed especially in metaphors which pump and clock used. In metaphors about stomach, most of the students liken stomach to some objects for its form. Some students liken stomach to beans and bananas. Kidney was used in metaphors according to its functions and liken to filters. And lungs was liken to balloons as its forms. There is also some metaphors about small and large intestine, veins, blood, throat, trachea, joints and bones.

As a result of this research, it can be observed that students use a lot of metaphors about organs. Students formed metaphors about organs' shapes, dimensions and actions. Also metaphors about organs functions and colors were also determined. The developed metaphors were generally concrete and positive.

Keywords: Organs, metaphor, student, science course



The Relationships between Preservice Teachers' Mathematical Literacy Self Efficacy Beliefs, Metacognitive Awareness and Problem Solving Skills

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Mathematical literacy is a concept that is mostly emphasized in the PISA (Programme for International Student Assessment). The mathematical literacy definition for PISA is "Mathematical literacy is an individual's capacity to identify and understand the role that mathematics plays in the World, to make well-founded judgements and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen" (OECD, 2003). Mathematical literacy is seen as a concept that includes not only the knowledge of mathematical concepts and operations but also how effectively mathematical knowledge could be used in dealing with various issues that may arise in real life contexts (MEB, 2012). Self efficacy is one's thought about what he/she is efficient to perform and converting it to behaviours by evaluating his/her own skills and capacity (Schunk, 2011). Self efficacy belief toward mathematical literacy is an individual's belief about its own abilities of mathematical processes, skills and positions at the situations that are faced at school, work and daily life (Özgen & Bindak, 2008). Metacognition is one's understanding about its own cognitive processes and uses and the techniques of metacognition develops children's problem solving skills (Reeve & Brown, 1984). Problem solving is a concept related with academic success. According to Polya (1981) problem solving is finding your way in a difficult situation, moving forward around the obstacles, reaching a goal that could not be reached immediately. There are a lot of advantages of problem solving in the training processes like interesting, increasing motivation and think logically (Chapman, 1997). It was stated that there is high correlation between mathematical self efficacy belief and mathematics performance and it has strong effects on problem solving skills (Pajares & Miller, 1994).

The relationships between metacognitive awareness, problem solving skills, mathematical literacy self efficacy belief and different variables were examined in the literature and different results were found (Altunçekiç, Yaman & Koray, 2005; Karakelle, 2012; Özgen&Bindak, 2011; Özsoy&Günindi, 2011). The relationships between preservice teachers' mathematical literacy self efficacy beliefs, metacognitive awareness and problem solving skills and also the effects of two variables on problem solving skills were examined in this research.

The method of the research is correlational survey method. Correlational survey method is the model that aims to determine the presence and/or degree of changing together between two or more variables (Karasar, 2005). The research was implemented in 2014-2015 spring semester in Education Faculty of Ondokuz Mayıs University. The sample consists of 171 preservice teachers from primary education department. The data was collected with "Metacognitive Awareness Scale" developed by Schraw and Dennison (1994) and adapted into Turkish by Akın, Abacı and Çetin (2007); "Problem Solving Inventory" developed by Heppner ve



Petersen (1982) and adapted into Turkish by Şahin, Şahin and Heppner (1993); "Math Literacy Self-Efficacy Scale" developed by Özgen and Bindak (2008). The data was analysed through descriptive analyses, pearson correlation and regression analysis.

As a result of the research, it was found that there is significiant relations between preservice teachers' problem solving skills and mathematical literacy self efficacy beliefs and metacognitive awareness scores. Stepwise regression analysis results revealed that metacognitive awareness scores explain 15 % of variability in problem solving skills and in the second model mathematical literacy self efficacy beliefs and metacognitive awareness scores together explain 18 % of variability in problem solving skills. These findings are consistent with the other researches2 results (Karakelle, 2012). The research can be performed through different variables.

Keywords: Preservice teachers, metacognitive awareness, problem solving skills, mathematical literacy self efficacy beliefs



Quality Assurance in Andragogical Self-Assessment Methods of Online

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"Study without thought is labor lost; thought without study is perilous" (Confucius)

This paper is drawn from my research-based teaching activity applied to university students of English regarding self-direction and andragogy, in the attempt to establish philosophy and methodology. Since academic teaching is a complex educational process, I will only address the assessment stage in terms of quality assurance findings, which may give a diagnosis of the pedagogical techniques' efficiency, the one that signals the need of changes for a presumable improvement. Assessment of online learning takes many forms (objectively-scored tests, subjectively-rated tests, criterion-referenced tests and learner self-evaluation), but I will focus on learner's self-evaluation, a relatively new method in the field of adult education (Rogers and Knowles).

"Since most universities in the 21st century began to deliver their courses via Web 2.0 technologies, learner self-evaluation has been used considerably to assess online learning". (Pedagogical and Andragogical Teaching and Learning with Information Communication Technologies, p.55)

First I choose to start with the hypothesis that undergraduate compulsory education is or should be designed by academic staff as a preparation basis for the alumni continuing professional education, ideally with the revision of the curriculum (Erikson and Piaget). My concerns for lifelong learning that is measured in the form of formative and summative assessment are the core of the paper, on the purpose of presenting how the shift from higher education level to a career-making advancement may happen. I will give an account of both strategies and methods following a stage-based structure from goals to possible achievements.

Then, I will exemplify with a second language acquisition, more specifically with learning idioms and the difficulties in translating them from Turkish to English and vice versa. A student achieves knowledge concerning fixed phrases in the foreign language based on several types of resources and then checks one's own work for errors. The investigation into strong and weak factors of the process will further mark the beginning of a deeper analysis, while the successful review becomes the reference point within the proposed quality assurance activities with relevant general conclusions. Malcolm Knowles's approach will be taken as basis of discussion, including the five major assumptions about adult learners: self-concept, experience, readiness to learn, orientation to learning and motivation to learn. His conception of andragogy stems from the different traditions of psychological analysis: humanist and behavioral. I will investigate how much of his theory or set of assumptions may serve teaching practice. Independent, asynchronous learning is supported by the wide possibilities opened by technology, not being bound by the constraints of space, time and experience.



After the presentation of learning stages and an in-depth description of possible andragogical self-assessment methods, as a conclusion I will look into the educational benefits of allowing students discover their own potential and results, in a trial and error approach, in order to achieve not only new knowledge, but also to develop capabilities in specific areas.

Keywords: andragogy; self-evaluation; online learning, Knowles



Examining Effects of Worksheets to Associate Thermodynamics Concepts Related Daily Events

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We encounter with many applications of thermodynamics in working principles of many machines and in many events of our lives. However previous studies (Avezedo e Silva, 1991; Cotignola, Bordogna, Punte, & Cappannini, 2002; Tatar & Oktay, 2011) pointed out students have problems such as conceptual or associating with daily life in thermodynamics. Active learning approaches can help to overcome these problems and can enhance students' conceptual understanding as indicated in many studies (Akınoğlu & Özkardeş Tandoğan, 2007; Etherington, 2011; Karamustafaoğlu, Coştu, & Ayas, 2006). Worksheets are one of the important tools that make the students active in learning environment.

The objective of this study is to examine the effect of worksheets as a tool used to teacher candidates' associate thermodynamics concepts related daily events in an active learning environment. With this aim firstly a questionnaire that consists of eight open-ended questions was developed by the researchers. The content of these questions was relationship of zeroth and first laws of thermodynamics and expansion concept with daily events. This measurement tool was applied to fifteen physics teacher candidates in the Black Sea Region of Turkey during the 2014-2015 academic years. They were in fourth year of physics teacher education program. They enrolled introductory physics and thermodynamics courses before this study. So they have concepts and laws of thermodynamics. But these courses were in traditional manner. This teaching sequence is formed by memorization-based learning of concepts, laws and practice standard problems.

Answers of the physics teacher candidates were analyzed via understanding level criterions as sound understanding, partial understanding, misunderstanding and no understanding. After examining students' answers and finding out the conceptual problems, three worksheets were developed by the researchers to enhance conceptual understanding. These worksheets prepared according to Predict- Observe- Explain (POE) strategy was developed by White and Gunstone (1992) to find out students' predictions, and their reasons for making these, about a specific event.

The researcher designed four hour lesson and applied worksheets contain hands-on activities. Teacher candidates had concrete experiences. They performed activities in groups and were given opportunity to discuss events. So they were active in the learning environment. At the end of the last lesson, questionnaire was administered to teacher candidates again. And after completion of questionnaire the interview was implemented about their opinions related to application.

The results of questionnaire showed that after application there was an increase for sound and partial understanding. After application of worksheets, teacher candidates were able to use



zeroth and first laws of thermodynamics and expansion concept in daily events more easily. Teacher candidates stated that such a learning environment allowed them to active participation to lesson and share their opinions with their peers. Also teacher candidates mentioned that they both enjoyed this application and also learned by doing. It was concluded that worksheets enhanced teacher candidates' understanding relationship of zeroth and first laws of thermodynamics and expansion concept with daily events. Also they provided active learning environment to teacher candidates.

Keywords: thermodynamics; worksheets; daily events; physics teacher candidates



The Contribution of DynEd to Foreign Language Learning

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It is clearly evident that the use of technology is the indispensable part of especially foreign language learning. Since its accessibility and flexibility, both students and teachers are eager to integrate technology into the classes. Besides, in some contexts teachers are supposed to offer blended opportunities. As teachers of English, they suffer from to find and to adapt suitable materials for teaching language skills. Blended learning environments give chance teachers to create better teacher-student colloboration and teacher development. In literature, Blended Learning signifies the inclusion of computer technology providing online or offline activities and materials in the mix, rather than implying this is a wholly new approach to teaching and learning. In Turkey, the majority of foreign language teaching still takes place only in the classroom, and as language teachers, we know from experience that achieving the "optimal" conditions as just presented poses a significant challenge in most foreign lan-guage teaching situations where students have limited opportunities to actively engage in using the target language. Therefore, the Ministry of National Education (MoNE) introduced DynEd in 2007 in order to provide better opportunities for both teachers and studentd in English language education. DynEd is a Computer Assisted Language Learning software which aims autonomous learning. It is prepared in English for different age groups, levels and needs.

The aim of this study was to examine the views of English teachers about DynEd programme, to determine shortcomings and contributions of DynEd, and to make some suggestions about the necessity and effectiveness of the program if any. The participants were 130 English teachers who have worked in different provinces at state-run primary, elementary and high schools in Turkey in 2015-2016 academic year and the data collected through an on-line questionnaire. The questionnaire was composed of two sections. In the first section, there were personal data such as gender, type of school, teaching experience and province where they have worked. In the second section, there were four open-ended questions about the views of the teachers on usage of DynEd. The results of the study were analyzed quantitively by using SPSS v11.5. Results revealed that most of the teachers agreed the necessity of DynEd but their students cannot use the DynEd efficiently because of some technical and equipment problems such as lack of enough computers, and problems about the internet connection and server problems. The results of the study have several implications for educational authorities and for the teachers. Firstly, it was revealed that perceptions of teachers towards DynEd are generally positive and most of the teachers are aware of the advantages of CALL. The MoNE can take into consideration positive perceptions of teachers and their recommendations for effective implementation of CALL. These teachers are more eager to use CALL in their lessons and authorities can provide the appropriate teaching situation for these teachers. In addition, pre-service training such as special DynEd lessons can be offered to ELT students in ELT departments of the universities. Finally, it can be



stated that the MoNE should provide in-service teacher training focusing mainly on the implementation of CALL in English language classes. Related with this, professional development of teachers related to CALL can be promoted. With competent teachers and technologically well equipped classes, CALL can be implemented in Turkish primary schools more successfully. Since this study is one of the first that was conducted with EFL teachers throughout Turkey, similar studies can be conducted to get a broader perspective in this area.

Keywords: DynEd, Blended Learning, Foreign Language Learning, CALL



Measure the Motivation of Middle School Students towards Learning Mathematics: A Scale Development Study

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The demotivated students towards mathematics are one of the common cases mathematics teachers concern about. Due to the challenges in grasping concepts in mathematics lessons, many students experience "learned helplessness" (Yenilmez, 2010). For this reason, it is of critical importance to increase the motivation of students in mathematics lessons. Even though psychologists cannot make a widely recognized definition for motivation, it is defined as an affective dimension that has an effect upon participating in an activity. In other words, motivation is considered as an affective behavior.

According to Ford (2002) motivation has three components: Goal orientations, emotions, and self-confidence. Concerning goal orientations, this model points that people are motivated in two ways: ego goals and mastery goals. Besides, curiosity and interest are two important emotions that constitute motivations. Lastly, in this model, self-confidence is defined as the degree of students' belief in success in an activity.

This study aims to develop, according to Ford Model (1992) a valid and reliable 5-point Likert Scale which intends to measure the motivation of middle school students towards learning mathematics.

A survey consisting of 43 items were developed by reviewing the related literature and gaining expert opinion. This survey was administrated to 200 students in the pilot study. According to the results of the pilot study, irrelevant items were excluded and some items were added. In result, a revised survey consisting of 30 items were formed. This final scale was administrated to 360 students (5th, 6th, 7th, and 8th grades) of a middle school in Yenimahalle district in Ankara. 324 students voluntarily decided to participate in the study. Among those 324 students, 4 forms were decided to be invalid so they were excluded.

The KMO value of the survey is found as 0.94 and Barlett Value (Approximate Chi-square= 2936,721 and p=0,000). Considering the purpose of the study and related literature, the items which has no loadings on any factor, which cross-loads, and which decreases reliability of the survey (6,7,13,16,20,21,22,24,26,27) are eliminated. After analysis, three factors were obtained. In coherence with the purpose of the study, factors were named as following: (i) Factor-1: Motivation/Self-Confidence towards performance and research, (ii) Factor-2: Motivation/Emotion towards curiosity and interest, (iii) Factor-3: Motivation/Goal towards goal. The eigenvalues for factors are obtained as following: The eigenvalue for Factor-1 is 8,279, the eigenvalue for Factor-2 is 1.486, and the eigenvalue for Factor-3 is 1,363. The factor loading values are between 0,48 and 0,76. The three factors accounts for %55, 64 of



total variance. The internal consistency of the survey is found as a = 0.921 while a values for each factor are as follows: $a_1 = 0$, 90, $a_2 = 0$, 84, and $a_3 = 0$, 66. To determine Test-Retest reliability, 15 days later the survey was re-administrated to particular 51 students. In this further analysis, the coefficient of stability is found as 0,784.

To ensure the construct validity of the survey, in a different school with 385 students Confirmatory Factor Analysis (CFA) was applied. The model gained after CFA reveals significant fit indices (X^2 = 407, 31; N= 385; sd= 167; X^2 /sd=2, 43; p= 0.00). Since X^2 /sd=2,43<2,5, the model shows a good conformity (Şimşek, 2007). 0,06 value for RMSEA value indicates a good conformity, 0,90 for GFI and 0,88 for AGFI indicates an accaptable conformity (Jöroskog & Sörbom, 1993), 0,045 for SRMR indicates a good conformity (Brown, 2006), and CFI=0.98, IFI=0.98, NFI= 0,97 values indicate very good conformity (Büyüköztürk,2012; Meydan & Şeşen,2011). These values demonstrate that this model displays a good conformity.

The results of the analysis show that the survey is reliable at satisfactory level. This scale can be used to measure the motivation of middle school students towards learning mathematics. The reliability and validity of the scale can be examined with different samples in further studies.

Keywords: Learning mathematics, Motivation, Validity, Reliability, Scale development



English Major Students' Perspectives on Pronunciation Instruction

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The recent developments all around the world and the growing role of English as a lingua franca have encouraged many countries, as well as Turkey, to reconsider their commitment to English language teaching. Of the debates among researchers, practitioners and learners, whether language is better taught by native or non-native English teachers deserves a seminal place. Even though a "both/and" rather than an "either/or" discourse sounds more encompassing and less discriminatory especially in the workplace and recruitment situations, the learner perspectives might still be idealizing one rather than the other. Therefore, capturing the learners' preferences could help better conceptualize the difference between language proficiency and language practices.

Traditionally, the winner of the debate was quite simple: native speakers. They were thought to be the presenters of an authoritarian or superior model of English (Graddol, 2006). With an endowed superiority, they were considered to be the only representatives of a proper form of the target language model. They were mentioned to be the target group in the national syllabuses (see above), idealized through methodologies (e.g., the Audio-lingual Method and the weak version of CLT) and were the credible agents in linguistic theories (Chomsky, 1965).

Besides these, some other strengths of native teachers like less reliance on grammar and textbooks, a better use of technological devices, commitment to student centeredness and speaking ability were noted as their potential advantages in several studies. The speaking ability in question could also be interpreted as a biological advantage of native speakers because RP "requires a different setting of the jaw, lips and other speech organs" (Honey, 1991, p. 55). The biological advantage could be made more visible through Lenneberg's (1967) Critical Age Hypothesis. According to the hypothesis, after the age of puberty, the brain loses its elasticity and it is difficult for someone to develop a language as fluently as a native speaker. Native teachers meet the expectations of "models" when they were teaching. Fulfilling the expectations of learners in terms of their representation of a proficient speaker worth imitation, native teachers were considered to be one step forward compared to the non-native speakers.

However, with the use of English in international contexts, the traditional native supremacy was challenged. Despite the growing need to let learners get exposed to non-native/non-native interactions, learners were usually assumed to be interacting with native speakers (Walker, 2010). The ratio of native and non-native interactions has sparked new debates especially in the lingua franca context and the study provides the strengths and weaknesses of native and non-native-speaking teachers of English. Many studies in literature are conducted in ESL



situations without specifying the background of the context and participants. Narrowing the debate to agents of pronunciation teaching in Turkish language teaching context, the issue of pronunciation instruction with reference to the agents of pronunciation teaching in an English as a Foreign Language context is elaborated. This study aims at investigating the learners' perceived pronunciation strengths and weaknesses, favorable pronunciation learning environments, and preferred agents of pronunciation instruction. To this end, focus group semi-structured interviews were carried out with 30 English major students. A qualitative content analysis was employed to determine learners' perceived pronunciation competence, their schooled and out-of-school pronunciation practices and favorable pronunciation instructors. Some conclusions are drawn and several implications for future studies are proposed.

Keywords: Native instructors, non-native instructors, teaching pronunciation, English as a lingua franca.



Understanding Pronunciation Learning Strategy Use: A Vignette Analysis

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As is clear in the related literature, pronunciation is a neglected area in English language education throughout the world. The area needs to be investigated so that informed decisions regarding pronunciation teaching could be taken. One of the particular are as that needs to be investigated is strategy use and training in pronunciation teaching. Strategies are vital as they turn language teaching into an easy, enjoyable, and self-directed process and enable learners comprehend and retain new information. Thus, the present qualitative study was designed to find out pronunciation learning strategies employed by the preparatory English majors (n=56, 44 female and 10 male participants) in a middle-sized university in the north east part of Turkey. Convenience sampling was decided to be the most appropriate technique to gather in-depth data from the available students in their institutions. Inspired by Oxford's Strategy Game, eleven problem-oriented vignettes applicable for EFL context were devised. The fabricated vignettes include ten different areas: natural pronunciation, difficult and long words, self-confidence, misunderstanding, sounds not existing in Turkish, tone, sounds existing in native and target language, IPA knowledge, and intonation. The fabricated vignettes were piloted with ten students who did not participate in the study so as to check the intelligibility of the situations. The recommendations of the students in the pilot process were taken into consideration to clarify the situations. In the application process, the participants were supposed to write what they would do in those hypothetical situations to solve their pronunciation-related problems. The content of the participants' answers were analysed and the results were reported quantitatively and tabulated to help the reader visualise them. The vignettes were quantified and interpreted on the basis of Peterson's (2000) classification of pronunciation learning strategies. The content analysis revealed that similar to most of the previous studies, while cognitive metacognitive and memory strategies were frequently employed by the participants, social, compensation and affective ones were underused. The analysis also revealed that the participants use a variety of tactics in particularly cognitive strategies domain. The most frequently used cognitive tactics are listening to tapes, music and watching TV/movie, pronouncing a difficult word over and over, memorising and practising target language sounds over and over, memorising and practising target language phrases, noticing mouth position or watching lips, practising listening, talking with others in target language, writing phonetic forms of words over and over again, concentrating intensely on pronunciation while listening to the target language, and reading aloud. However, as language learning requires the development of not only cognitive and metacognitive but also emotional and interpersonal processes, it can be concluded that these underused strategies need to be promoted with strategy training and students' awareness need to be increased. Thus, the portrayal of pronunciation strategy use is expected to help material developers to integrate



pronunciation learning strategies into newly devised instructional materials. The results are also expected to help teachers to take informed decisions about the instructional steps they take in their classrooms and plan strategy training.

Keywords: pronunciation, learning strategies, ELT, cognitive



The Comparison of Turkey-Shangai (Chinese) Pisa 2012 Mathematical Literacy Results

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In 21, century the countries aim the world citizenship concept from individuality and training the students with the qualifications of world citizen became one of the main goals of the countries (MEB, 2013). PISA (Programme for International Student Assessment) is one of the most comprehensive exams in the world that was founded by OECD (Organisation for Economic Co-operation and Development) in 2000. PISA measures the concept of "literacy" in reading, science and math fields. PISA 2012 mathematics framework explains the theoretical underpinnings of the PISA mathematics assessment, including a new formal definition of mathematical literacy, the mathematical processes which students undertake when using mathematical literacy, and the fundamental mathematical capabilities which underlie those processes. And it is intended to describe the capacities of individuals to reason mathematically and use mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena (OECD, 2013). NCTM established the Commission on Standards for School Mathematics in 1986, for the aim that "Create a coherent vision of what it means to be mathematically literate both in a World that relies on calculators and computers to carry out mathematical procedures and in a world where mathematics is rapidly growing and is extensively being applied to diverse fields and create a set of standards to guide the revision of the school mathematics curriculum and its associated evaluation toward this vision." (NCTM, 2004: 1). Mathematical literacy develops the individual's skills that converting an expression to mathematical expressions, using mathematical language to solve problems, think mathematically, see and use the mathematical relationships in contemporary and scientific events (Tekin&Tekin, 2004). The structure of mathematical literacy, as defined for PISA, strongly emphasises the need of developing students' capacity to use mathematics in contexts of real life and it is important that they have rich experiences in their mathematics classrooms to accomplish this (OECD, 2013). Moreover, mathematics instruction were deeply influenced by the emergence of constructivism and technological advancements, while curricular recommendations were meant to help modern mathematics curricula reflect the increasing value placed on mathematical literacy and technological agility in the age of information (NCTM, 2004).

Turkey participated in PISA for the first time in 2003, which measures the using abilities of 15 aged students' knowledge and skills they learned in school in contexts of real life in reading, math and science fields (OECD, 2005). PISA that is performed once every three years, was performed focusing mathematical literacy in 2012. In PISA 2012 it was seen that our country was below the OECD average in all three fields but the increase depending on the years was driven and the points difference with OECD countries was reduced (MEB, 2013). The results of PISA were examined in the terms of different variables in various researches (Akyüz, 2010; Gürsakal, 2012; Usta, 2014). In PISA 2012 the country took the first place in all three fields of reading, science and maths was Shanghai, China. But in the literature it is seen that there is no so many researches that examines the PISA results of Shangai. Therefore



in this research Turkey and Shangai (Chinese) PISA 2012 mathematical literacy results were compared in the terms of some different variables that were determined by PISA.

In this research, descriptive survey methods were used. The data collected in PISA 2012 was used. The sample was consisted of the students participated in PISA 2012 from Turkey and Shangai. The data were examined through descriptive analysis. As a result of the research, it was seen that by some variables, Turkey-Shangai (Chinese) PISA 2012 mathematical literacy results are at similar levels each other and OECD average. But it is also seen that it is differing by other variables. When the education programmes of the two countries were compared, the lessons in primary and secondary school are parallel to each other (Education Database). So it is understood that the differences of the results originate in disparity of the two countries' education practices.

Keywords: Shangai, PISA 2012 results, mathematical literacy, mathematics achievement



An Investigation of Illustrations in Social Studies Course Books with Regard to Stereotypes

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Stereotypes, which are widely used in daily life, are pre-constructed images in the minds that ease to decide over people, cultures, events and societies by filling the information gaps (Göregenli, 2012). These images affect the attitude towards people when a contact with them is constructed. Besides conflicts, this situation leads to absolute acceptance. The most dominant feature of the stereotypes is the high resistance towards the change in education. Course books have an important role in education, that's the reason why the development level and needs of the students should be clearly specified and taken into consideration. This shows that the content of the course books such as illustrations, poems, examples, and texts needs to be carefully selected. The course books, which are composed of both written and visual materials, should be appropriate for the development and comprehension level of students.

Social Sciences course being among the most important courses of the primary education level that can be considered as the corner stone of the education process, have a place to directly provide the students with skills such as historical empathy, decision making, communication, discriminating stereotypes. Therefore, the stereotypes in the social studies course books needs to be carefully investigated.

The main purpose of this study is to investigate and compare the social studies course books prepared in 1998 which are prepared in accordance with the principles of behaviorist approach, and in 2005 which are prepared according to the constructivist approach. The chance to have a comparative insight in the two different curricula prepared in 1998 and 2005 makes this study important. Additionally, another important aspect of this study is being the first on to investigate social studies course books in Turkey in terms of stereotyping.

The research questions of this study are as follows;

- 1. How are the illustrations of occupational groups categorized in social studies course books?
- 2. In the illustrations of social studies course books is gender used in generalizations?
- 3. Are the same illustrations used for certain topics in Social studies course books?
- 4. Are the illustrations in Social Sciences Course books sensitive to social gender equality?
- 5. Is gender a determinant for occupations in illustrations in social studies course books?
- 6. Is the disability concept in the illustrations of social studies course books viewed in accordance with rights-based approach?

In this study document analysis method will be used. The data obtained through the investigation of social studies course books are analyzed through content analysis method and the findings are categorized by the researchers.



The findings of this study revealed that there is not any predetermined rule in the selection of illustrations of social studies course books, and most of the illustrations are selected randomly. Most of the illustrations are observed as stereotyping and they illustrated the same occupation groups. Additionally the illustrations are not sensitive to social gender equality, and needs to be reconsidered in regard to equality of women and men. Finally, the disabled people in the illustrations of social studies course books are shown in need of help which forms a stereotyping perception towards the disabled. To overcome this situation, the necessary modifications should be made and shown as an example.

In conclusion, course books are highly important being the most widely used material by the students and teachers. The contents of the course books should be carefully designed in order not to evoke negative impressions in the students. The illustrations need to be relevant and include good practices. The illustrations should not stereotype any person or group.

Keywords: Education, social studies, course books, illustrations, stereotypes



The Relationship between Pre-Service Teachers' Critical Thinking Tendecies and Problem Solving Skills

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The leading tool human beings use to understand and make sense of the world is thinking. Thinking activity is behind the most of the characteristics human beings have. Talking, discussing, making choices and a lot of acts like that are all directed by thinking. All human beings think by their nature. But if they don't have effective thinking skills, they often think biased, deficient and not goal oriented. On the other hand, knowledge society that we live in in this century, demands individuals that can examine information he/she encounters, thinks independently and takes different approaches to events. For this purpose, critical thinking is an important mental process for human beings that accord with the demands of the knowledge society. Critical thinking is defined by the skill of taking the responsibility of his/her own ideas.

Critical thinking tendency is the intrinsic motivation of thinking critically when someone faces a problem to solve, an idea to analyse or a situation to judge. Problem solving is a complex process that progress from feeling the problem to solving it by means of affective and behavioural skills beside cognitive skills. Problem solving skill involves bordering and understanding a problem, choosing the appropriate method for its solution, operating that method and analysing the results when facing a problem. Problem solving has an impact on success, happiness and mental health of human beings.

The subject of this study is the relationship between critical thinking tendencies and problem solving skills of pre-service teachers and therefore the main problem of the study is stated like below:

1. Is there a meaningful relationship between the critical thinking tendencies and the problem solving skills of pre-service teachers?

Beside this main problem, the sub-problems of the study are listed below:

- a. Is there a significant difference between the problem solving skills of pre-service teachers according to critical thinking tendency level (low, positively)?
- b. Is there a significant difference at the sub-dimensions of Problem Solving Inventory according to critical thinking tendency level (low, positively)?
- c. Is there a significant difference between the problem solving skills of pre-service teachers according to compound effect of critical thinking tendency level and respectively gender, department and grade level?

In this study to respond the main problem and sub-problems of the study the descriptive research model was chosen. The study was structured as a relational screening model to explore the relationship between critical thinking tendencies and problem solving skills.



The universe of the study consists of 1200 students who study in Afyon Kocatepe University Education Faculty 1. and 2. class. The sample of the study was 224 students who have been chosen from the universe by the stratified sampling method.

The California Critical Thinking Disposition Inventory which is developed by Facione and Giancarlo (1998) and adapted into Turkish by Kökdemir (2003) and Problem Solving Inventory which is developed by Heppner and Petersen (1982) and adapted into Turkish by Şahin, Şahin and Heppner (1993) are used as a means of data collection in the study. Cronbach alpha reliability coefficient of The California Critical Thinking Disposition was found. 84 and of Problem Solving Inventory was found .86. The scale and information form was distributed to 231 pre-service teachers but 7 scale was not evaluated. The data acquired from the implementation was analyzed by statistic package.

A positive and meaningful relationship was found between critical thinking tendencies and problem solving skills of pre-service teachers (r=,696; p<.05). Beside that, there is a significant difference between the problem solving skills of pre-service teachers according to critical thinking tendency level (p<.05). Accordingly, problem solving skills of pre-service teachers whose critical thinking tendencies are positively are meaningfully higher than lower ones. A significant difference at the sub-dimensions of Problem Solving Inventory according to critical thinking tendency level was found (p<.05). Finally no meaningful difference was found between the problem solving skills of pre-service teachers according to compound effect of critical thinking tendency level and respectively gender, department and grade level.

Keywords: critical thinking tendency, problem solving skill, pre-service teacher.



Cultural Representations in EFL Course Books

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In foreign language teaching (FLT), course books are commonly perceived to be one of the major materials leading the course of action. The current materials used in our English as a foreign language (EFL) classrooms are developed in accordance with Communicative Language Teaching (CLT), intending to create meaningful communication and the Common European Framework (CEF), aiming to encourage students to communicate successfully and effectively in the target language. Language and culture are linked to each other tightly and in order to achieve successful and meaningful communication in the target language, culture should be integrated into language teaching process. In CLT, authentic materials should be of frequent use since those materials include information on the target language speaking population's daily life. Given the fact that language is mainly for communication, the language learner should be aware of the target language communication forms and functions. The learner cannot carry out a healthy communication without knowing the aspects of target language culture. Since the students who learn English as a foreign language generally have little chance to experience the target culture, course books play a crucial role in FLT context. In this respect, course books take the responsibility of introducing cultural content, which could take the form of home culture, target culture, and international target culture for EFL students. As both the syllabus of CEF and the nature of CLT put great emphasis on cultural content, the present study aims at investigating the cultural representations embedded in two different English language teaching course books developed by the Turkish Ministry of National Education in different years. The samples, Breeze 9 English course book written in 2011 and Power Up 9 English course book in 2015 were purposively selected to present whether these course books differ in terms of their cultural content representations. Additionally, 9 English teachers using Breeze 9 were selected via snowball sampling and a structured interview was used to obtain the teachers' views considering cultural content and its representations in Breeze 9. In order to analyze the course books in terms of their cultural representations, content analysis was conducted. In the data analysis, a modified version of the framework for the evaluation of cultural representations suggested by Pfister and Borzilleri (1977) was utilized including five general cultural themes: family unit and the personal sphere; the social sphere; political systems and institutions; environmental sphere; and religion and the arts. The preliminary findings showed that Breeze 9 included cultural elements regarding home culture, target language culture, and international target cultures. It was revealed that the representations of international target cultures outnumbered those of home culture and target language culture, thus indicating the status of English as a lingua franca. The responses of English teachers also confirmed the result of the content analysis by stating the importance of culture in foreign language teaching and the inseparability of language and culture as being consistent with the relevant literature. The cultural content analysis of the course book, Power up 9 and the difference between Breeze 9 and Power up 9 will be shared in the conference.

Keywords: culture, cultural representations, course book evaluation, ELT



An Investigation into Medical Students' English Language Needs: The case of KTU

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Due to the acceptance of English in twentieth century as international language of science and medicine, a considerable body of medical research and literature has been produced in English. This dominance of English in medical accounts payes the way for emergence of a new ESP branch (English for Specific Purposes) as EMP (English for Medical Purposes). The basic insight into this trend is to offer course design, content and materials by being responsive to target language learners' own agenda. It is sure that what is suitable in a class or a learning environment might not serve purposes in another one. Therefore, it is necessary to find out first what is specifically appropriate, available, applicable for the target situation and target language learners in terms of their needs. In discovering these needs, needs analysis is regarded as an integral part of decision making processes in EMP. It is accepted as sine quo non component of a course development process in this trend. Without conducting a needs analysis process, using a medical English course book might not be enough for a medical student studying in an EFL (English as a Foreign Language) context like Turkey since most of the medical English course books in use are mostly addressing the needs of students in an ESL (English as a Second Language) context. Accordingly, as a part of a needs analysis process, this study aims to investigate academic English language needs of first year medical students who are attending advanced English course at the Faculty of Medicine at Karadeniz Technical University. The data was collected via a structured questionnaire with 50 items prepared by experts in the field after conducting a thorough literature review. The structured questionnaire covers five different parts focusing on medical students' purposes of learning English, significance of learning English, their preference of learning environment, language learning needs of major language skills (reading, writing, speaking, listening), their preference of assessment type. Five-point Likert type format was used in constructing the questionnaire. The questionnaire was administered to around 200 students at the Faculty of Medicine at Karadeniz Technical University. The students were asked to rank items in order of importance by assigning a number ranging from 1(least) to 5 (most). The data was analyzed quantitatively. Descriptive statistics was employed in order to analyze the data. This study in fact is the first part of a longitudinal study aiming to design a medical English course for the students at agenda. The findings obtained via this survey will contribute to the process of curriculum development for the students who are attending advanced English course at the Faculty of Medicine at Karadeniz Technical University. The preliminary findings show that among all major language skills, especially reading skill is regarded as one of the most important skill for the medical students since they need to follow recent literature while they are pursuing their medical education.

Key words: English language teaching, English for medical purposes, language needs, needs analysis



The Relationship between Thinking Styles and Attitudes of Preservice Teachers from Department of Computer Education and Instructional Technology (CEIT) toward Information and Communication Technologies

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Thinking styles are approaches and inclination of individuals against various problems, incidents and variables encountered as result of their thinking process. It is expected that preservice teachers are capable of utilizing Information and Communication Technologies (ICT) in internal and external course activities and of being models for their students. In this regard, it is crucial to investigate the relationship between thinking styles and attitudes of preservice teachers, from the department of CEIT who are expected to use ICT effectively, towards ICT. This study aims to investigate thinking styles of students at the department of CEIT, their attitudes toward ICT and the relationship between these variables. According to the results, preservice teachers mostly preferred innovative thinking style which is innovative and imaginary and which deals with unfamiliar indefinite works; at least they preferred conventional thinking style which sticks with codes in their works and which is more realistic. In thinking style preferences, while gender and social class variables have no any relevance, a significant difference was determined regarding academic success level. It was observed that attitudes of participants toward using ICT in education were highly positive; and gender and grade level variables were not relevant with participants' attitude toward ICT; and there was a positive and proportional relationship between academic achievements and attitudes toward ICT. Furthermore, as perception levels of preservice teachers toward innovative thinking style increases, their positive attitudes toward ICT enhances. On the contrary, as their perception level toward conventional thinking style increases, their attitudes toward ICT is affected

Keywords: thinking styles, information and communication technology, computer usage in education, CEIT.



Who Should Decide on Educational Technology Reform Policies and Why?

Fulya SARI

A critical review of literature on education reform reflects a major lack of focus on understanding teachers' roles and perspectives in reform. In studies specifically examining educational technology reforms there is hardly any reference to teachers' involvement especially during the policy formation phases.

In 'reform initiation and policy' studies, teachers are hardly represented as significant stakeholders in identifying reform needs, setting political or practical agendas, or getting involved in any decision making in forming reform policy. Studies show that neither the goals, nor strategies or content of education reform come from or are initiated by teachers.

An analysis of 'implementation' research indicates that content or strategies of reform are framed and discussed independently of teachers' roles, capacities, and their academic and professional preferences. Reasons for 'adoption' of reform ideas are searched elsewhere instead of looking into teachers' perceptions and subjective meanings of the reform, their willingness or readiness to use any particular technology or how their 'responses to reform' are formed. Discussions of 'ownership' and 'power' surrounding reform implementation have not been treated with adequate focus on teachers' roles, capacities, and certainly not documented through their own 'voices'.

In evaluation and impact studies, teachers are hardly ever presented as forming definitions of success or they themselves evaluating reform. They are presented in the literature mostly as agents of practice who are being 'evaluated on'. Mostly any reference to teachers and their work in the reform literature is in reference to their apprehension to use the technologial tools or how they lag behind their students in motivation. Studies can be found that refer to teachers as 'inadequate' and 'irresponsible villains' or 'unprofessional troublemakers' with respect to reform practices. This presentation will focus on and critically analyze the involvement of the technology providing companies as the main actors in the formulations of educational technology reform policies and the possible harmful effects of the present situation on effectiveness and sustainability of reform investments.

Using critical and complexity theory frameworks and an advocacy/emancipatory approach, this presentation will discuss the detrimental effects of missing teachers' voices in reform and present new approaches to inclusive scholarship and the pressing need for teachers' action based research efforts in guiding better policy formation and more effective implementation.

The goal is to understand how teachers individually and in their 'communities of practice' understand and mediate education reform ideas and respond to them. Reflections of teachers through their own voices can show us the ways to authentic reform and a more socially just education community.

Key words: teachers' voice, educational technology reform success-failure, meanings of reform, teacher disempowerment, top-down reform, communities of practice, technology tools for teacher communities of practice



Key Points for Developing Trust in E-Mentoring

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Trust is viewed as a fundamental component of every social interaction between individuals and it has been studied in many disciplines. Trust is important in relationships, because it allows the parties to shape their expectations towards each other. Mentoring has long been viewed as a vehicle for effective knowledge transfer. Trust is a highly researched component as a moderator of the relationship between mentoring and knowledge transfer in traditional mentoring programs. Effective mentoring relationships are based on trust and trust is a key factor to successful mentoring programs. With the rising number of geographically dispersed people e-mentoring holds promise for helping to connect people across geographic and time barriers. And e-mentoring is becoming increasingly popular for various reasons and many web based e-mentoring sites such as MentorCity and MentorMatchMe are presently available.

Thus there has been very little work on the role of trust in e-mentoring. Therefore, it is important to evaluate the key factors related to trust in e-mentoring relationship. By utilizing the internet and related technology, such as websites, email, chat rooms, and other social networking tools the role of trust in e-mentoring need to be investigated. The main challenges of e-mentoring are finding the right e-mentor, developing a relationship with the e-mentor and establishing trust. But very few studies have examined how online trust is built in e-mentoring relationships.

The purpose of this study based on the existing literatures, examine online trust and how online trust is initiated and established in e-mentoring. And discuss to increase understanding of the challenges of developing trust in e-mentoring. As trust emerged over a period of time as a result of sustained communication and in e-mentoring relationships usually take longer to develop compared to face-to face mentoring. This study adds to a descriptive perspective to the literature on online trust. Additionally this study will help for producing easily trustworthiness in e-mentoring relationships. In conclusion, this study clarifies how online trust is built, developed and lost in e-mentoring settings.

Keywords: mentoring; e-mentoring; trust; online trust



A survey of existing OER resources in the field of language processing and their uptake in the context of Turkish Higher Education

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With recent technological developments and their impact on education, it is no surprise that we can no longer keep up with the quantity and quality of Open Educational Resources (OERs) available online. Production, adaptation and integration of such resources for institutional or individual purposes require certain technological infrastructure, teacher qualifications and positive attitude, administrative support and student readiness. Teachers' perceptions on the use of mobile devices and/or computer assisted language learning materials have been a widely searched area (Peters, 2007; Shohel & Power, 2010; Tai & Ting, 2011; Uzunboylu & Özdamlı, 2011). Admittedly, a very limited number of these studies directly refer to the OERs and teachers' familiarity and use of them in the contexts of language teaching. Furthermore, most of these studies have not focused on a wide range of educational contexts or included different target languages contexts (e.g. Aydın, 2013; Özdamlı, 2012). Moreover, especially in Turkish context, most of these studies focus on pre-service teachers' perceptions on the use of mobile devices in language teaching (Kulekci, 2009; Öz, 2015; Şad & Göktaş, 2014). This paper reports the findings of a survey-based study which aimed to find out (a) how much language teachers are familiar with OERs in the field of language processing, (b) how frequently they use them in their teaching, (c) their attitude towards training opportunities for such purposes and (d) their expectations from a mobile application which aims to transform leaner language into learning opportunities for English, German and Spanish. The data were collected through a commercial online data collection platform and analyzed both quantitatively and qualitatively using descriptive and inferential statistics and qualitative content analysis approach. The survey included sections including participant profile, familiarity questions for a list of commonly used OERs in the field of language processing technologies, questions for how frequently they used these resources and an openended question to find out their expectations from a mobile learning application using such technologies. In total, 111 (60 female and 51 male) participants completed the survey. University level respondents represented 29 different universities across the country. Majority of the participants (90%) were EFL professionals, but there were also participants who taught German (3), Turkish (4), Spanish (2) and other (2). In order to find out which OER technologies the participants were familiar with and use in their teaching, frequency counts were converted to scores for each OER listed in the survey. The results of the study revealed that teachers' familiarity levels were higher for all the OERs than their frequency of use. While the average score for familiarity level was found to be 150, it was 124 for the frequency of use. However, Spearman Rank-order Correlation was found to be significant at p<.01 level between their familiarity and use rankings (rho=.98). That is, teachers' familiarity

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level and how frequently they use a certain OER are related. The content analysis of the expectations question showed that teachers have three different kinds of expectations including (a) application use-related expectations (such as being user friendly, customizable, etc...), (b) language-related expectations (authenticity of language, easy access to different kinds of corpora, etc...), and (c) learning-related expectations (skill-based approach, learner progress report, etc...). Based on the results of the survey, it can be concluded that majority of the participants are not familiar or have never used OERs in their language teaching. However, again most of them definitely want to learn more about OERs and would like to use them in their profession.

Keyword: Open educational resources, mobile learning, higher education, teacher development



Effects of Sms Usage on Preservice Teachers Motivation during the School Experience Period

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The purpose of this study is to investigate the effects of the SMS (Short Message Service) usage during the course of school experience on preservice teachers motivation. During the course preservice teacher visits their enrolled school and they attended the different lessons at the different high schools. In this study it is aimed to support the preservice teacher by SMS while they are performing this school experience from beginning to end. By the way they might overcome from the probable important difficulties. The second aim of this study is support the preservice teacher's motivation giving clues by SMS. The first findings of the study derived from the interviews showed that they find the SMS support system beneficial for their professional development and also it was revealed that SMS support system make a positive aid while they are conducting the related activities in the classroom setting.

Keywords: Performance Support System, SMS, School Experience, Teaching Profession



The Effect of Multimedia Use on Science and Technology Course Motivation and Computer Anxiety of 8th Grade Students

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This study aimed to investigate the effects of multimedia applications involving the structure and properties of matter unit from science and technology course of secondary school 8th grade syllabus on the motivation level and computer anxiety of students.

A pretest-posttest control group quasi-experimental design was used in the study. The sample of the study consisted of two different classes from 8th grade students of a secondary school. One of the classes was determined as control group and the other experimental. There were 21 students in each class; therefore the study sample included a total of 42 students. The duration of the study was 6 weeks.

The experimental group students used multimedia material to study the subjects. The material included Vitamin Course Software prepared in cooperation with Sebit Education and Information Technologies Co., Turkish Telecommunication Co. and the Ministry of National Education (MNE), and videos, animations and slides prepared for the course subjects. Traditional teaching methods were used to handle the subjects in the control group in an equal period of time. "Motivation Scale for Learning Science" developed by Dede and Yaman (2008) was used to measure the changes in the motivation level of the students. The scale consists of 23 items. It is 5-point Likert-type. Minimum score that can be obtained from the scale is 23 and the maximum is 115. It consists of 5 sub-dimensions. It was administered to the experimental and control groups as pretest and posttest. The evaluation of the scores for motivation is 23.00-53.66, low; 53.67-84.32, middle; and 84.33-115, high. "Computer Anxiety Scale" developed by Ersoy (2005) was used to measure the changes in computer anxiety level of the students. The scale consists of 18 items. It is 5-point Likert-type. Minimum score that can be obtained from the scale is 18 and the maximum is 90. It consists of 4 sub-dimensions. It was administered to the experimental and control groups as pretest and posttest. The evaluation of the scores for anxiety is 18-41, low; 42-65, middle; and 66-90, high. The data obtained from the study were analyzed using SPSS.18.

It was found as a result of independent sampling t-test analysis of pretest scores from motivation scale for learning science that the mean motivation score of the experimental group was $X(dm\ddot{o})=85,10$ and it was $X(km\ddot{o})=88,52$ for the control group. The two groups were determined to be in high motivation interval (X>84,33). There was no significant difference between the groups (X=84,33).



It was also determined as a result of the posttest mean scores that the mean motivation score for the experimental group was X(dms)=85,43 and it was X(kms)=86,52 for the control group. The scores were in the high motivation interval $(t(40)=-0,441,\,p>0,0)$ and there was no significant difference between the two groups.

The dependent sampling t-test results for the pretest and posttest scores obtained from computer anxiety scale of the experimental group students were examined. The mean pretest score was determined to be $X(dk\ddot{o})=49,95$ and the students were found to be in middle level computer anxiety interval (42<X<65). The posttest mean score was found to be X(dks)=45,24 and it was again in middle level anxiety interval. However, it was observed based on the posttest results that there was a significant decrease in students' anxieties (t(20)=2,277, p<0,05).

It can be stated based on the findings of the study that the effects of multimedia applications and traditional teaching methods on student motivation in science and technology course were in a close level. Short-term research is not adequate for changing emotional features such as anxiety, self-efficacy, and attitude. It needs longer-term research. According to the findings about computer anxiety, learning medium supported by multimedia is an effective method for eliminating computer anxiety of students. The effective use of computers by students during lessons created a positive effect on their personal development. Their anxiety about technological tools was decreased and this helped them eliminate emotional pressure while using computers.

Keywords: multimedia, secondary school, science and technology, structure and properties of matter, motivation, computer anxiety.



The Relationship between Students' Intellectual Risk-Taking Skills and Metacognitive **Awareness and Academic Achievement**

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In this study, the relationship between secondary school students' cognitive risk taking skills and metacognitive awareness with academic achievement in the science course. The concept of science has a fairly large area because it is defined as the observation of nature and natural phenomena and prediction unobserved phenomena (Cepni, 2011; Yaman and Köksal, 2014). Therefore, as a requirement of science course, an interactive environment that requires students to take intellectual risks such as asking the question to students who have no accurate information on the results and no information about alternative solutions, to make explanations and confirmation (Yaman ve Köksal, 2014). Risk-taking behavior can be defined as the willingness to react and predict in cases where individuals cannot predict the outcome, do not exhibit performance over earlier and are not aware of alternatives. While metacognitive awareness is defined as individuals' use of intellectual abilities as required being aware of the different intellectual processes (Doğanay, 2007). Individual's selfrecognition and their awareness of the strengths and weaknesses are defined as metacognition and this awareness facilitates to absorb and assimilate the information at the highest level. The method of this study is correlational descriptive model. In this context, it is specifically

- strived to answer the following questions;
- 1. What are secondary school students' perceptions of taking intellectual risks and metacognitive awareness levels in the science course?
- 2. Do secondary school students' perceptions of taking intellectual risks and metacognitive awareness levels indicate a significant difference in terms of gender and grade level?
- 3. Is there a relationship between secondary school students' perceptions of taking intellectual risks and metacognitive awareness levels with academic achievement?

The participants of the current study are the students from 5th (19), 6th (21), 7th (39) and 8th (117) grades in a secondary school in Amasya province. 208 students, including 105 female and 103 male participated in this study. Cognitive risk-taking scale and metacognitive awareness scales are used in order to collect research data.

Intellectual risk taking and its predictors scale is a Likert-type scale which is developed by Beghetto (2009) and translated into Turkish and the validity and reliability studies were conducted by Yaman and Köksal (2014). Cronbach's alpha internal consistency coefficient was reported as 0.87.

Metagognitive awereness scale was developped by Sperling, Howard, Miller and Murphy (2002) in order to measure 3rd-9th grade children's level of metacognitive skills and was translated into Turkish by Karakelle and Sarac (2007). The scale consists of 18 items and



Cronbach alpha value was calculated as 0.80. Students' achievement scores were used taking the average of the exams held by the teacher of the course in the school term.

The analysis results show that the students' intellectual risk-taking skills are higher than the medium level (X=3,98, SS=0,51). The students' metacognitive awareness was found as 4,11 (out of 5). When students' perceptions of taking intellectual risks and metacognitive awareness levels were examined according to gender, it is seen that the mean of the female students (X=4.15), was higher than that of the male students (X=4.08) in terms of taking intellectual risks. According to independent samples t-test results, there was no statistical difference between males and females in terms of taking intellectual risks (t(206)=1,15, p>0,05). When metacognitive awareness results were examined, although the average of male students (X=4.04) were higher than that of female students (X=3.9244), it is seen that this difference was not statistically significant. (t(206)=-1,6, p>0,05)

There is a positive and medium significant relationship between students' intellectual risk-taking skills and metacognitive awareness levels. (R=,466, p<0.005). It is seen that there is also a positive and medium significant relationship between students' intellectual risk-taking skills and metacognitive awareness levels and the achievements in science course. It is observed that there are similar results in the Literature (Meyer, Turner & Spencer, 1997; Peled, 1997, Tay, Ozkan & Tay, 2009; & Oktay Cakir, 2013; Alexander et al. 2006; Yaman and Koksal, 2014). For example, Oktay and Çakır (2013) have found high values of students' metacognitive awareness in experimental studies which they conducted with secondary school students. In another study, Tay, Özkan and Tay, (2009) indicated that 4, 5, 6., and 7th grade students have a high risk-taking levels and these features also showed a significant correlation with problem-solving skills at a high level. The comparisons can be made carrying out this study in different disciplines, classes or different area.

Keywords: Cognitive risk taking skills, Metacognitive awareness, Achievement, Science course



Evaluation of the Educational Process in Distance Graduate Programs from the Perspectives of the Graduate Students

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The purpose of this study was to evaluate the educational process from online master student's point of view. This study has a qualitative nature. A semi structured interview schedule as the instrument was used to collect data. The participants of the current study are 26 teachers who registered in non-thesis graduate program at a distance in Amasya University. The interviews were conducted with the permission of the participants. Teachers were asked open-ended questions and their answers were written down. According to the findings, the reason of enrolling in a graduate program, what graduate degree means, the expectations from graduate education, whether expectations were met or not, the effects and usage of graduate degree, why online-education, disadvantages of online-education, and the problems faced during their online education and their solutions were revealed from the perspectives of the participants. Ten graphics were prepared to present the ideas of the participants. Teachers' responses were extracted as only one graphic. According to the data gained by the investigations, participants enrolled in the graduate programs to improve their knowledge level and it was understood that they expect to improve their professional development. Besides, teachers stated that communication is an advantage during the on-line course as to connection to the system. The problems they faced during their graduate education at a distance were presented. Additionally, their career expectations from graduate education were also revealed.

Keywords: distance education, graduate education, student perspectives



Facebook as a Distance-Learning Environment

Fuat Altunbaş

This study evaluates and examines the use of Facebook for educational purposes and as a distance-learning college environment. Though the main purpose of Facebook is social activity, it can also be used for education. Faculty members may find it easier to approach their target audience via Facebook, and students often prefer interacting with their classmates, downloading course material, and communicating with lecturers over Facebook to using their university's official software. The study is categorized into four sections: Facebook users, Facebook as an e-learning environment, Facebook as an educational resource, and harmful effects of Facebook.

Students believe Facebook is a valuable academic resource that can improve the development of academic connections and promote academic critiques, discussion, and networking, enhancing the learning experience. Instructors can also use Facebook to create open and closed groups, share course resources, fire up discussions, promote collaboration, improve relationships between students, and incorporate an array of learning tools. The study closes with practical recommendations for students and educators.

Keywords: facebook, distance learning, higher education, social network



Ethnocultural Empathy Level of Teacher Candidates

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Like many other countries, Turkey is composed of different ethnic groups and suffers from ethnic discrimination and prejudice. Psycho-social and contextual factors, specifically the common and pervasive exposure to racism and discrimination, creates an additional daily stressor on individuals. Ethnic discrimination has numerous effects, identified in the literature, on individuals such as low self-esteem, depression and anxiety. In a multi-cultural society, both cultural and ethnocultural empathy has become an important element in most health settings and developing this capacity has become a central component for health care professionals.

Cultural empathy is defined as the ability to understand an individual coming from another culture with different cultural values, emotions, attitudes, worldviews, traits, thoughts, and behaviors. Cultural empathic understanding is a cognitive ability that includes understanding different perspectives and the ability to differentiate an individual's own cultural self-values. Different from cultural empathy there is a relatively new concept called "ethnocultural empathy" regarding to understanding other ethnic groups' perspectives. Enthnocultural empathy has been used in many other research areas such as racialism, feminism, multiculturalism, ethnic identity, etc. It is defined as "empathy directed toward people from different racial and ethnic groups who are different from one's own ethnocultural group". People with higher ethnocultural empathy level will be able to behave more positively toward ethnic group members, perceive their feelings, show respect for their traditions, and protect them against discriminatory behaviors.

University students are composed of many people from various social, cultural and ethnic background. Most of the students leave their parents for the first time in their life in order to attend university and face problems such as adopting to a new city, new school, new social environment which is surrounded ethnic, cultural and political diversity. During this period, individuals' interaction with others become important in terms of effecting their trust, beliefs and psychological health. It is important that members from different ethnic groups learn to tolerate, understand, and accept each other's different ethnic and cultural upbringings and traditions in order to promote harmonious and peaceful environments. Student teachers must be trained not only how to provide quality teaching but also how to effectively communicate with students, regardless of the student's cultural background.

The aim of this study is to explore the teacher candidates' level of "ethnocultural empathy" and so understand the role of gender and ethnicity on teacher candidates' ethnocultural empathy level. Survey method is used to collect data in this casual comparative research. Sample of the study is teacher candidates studying in Faculty of Education at Çanakkale



Onsekiz Mart University in the academic year of 2015-2016. The Scale of Ethnocultural Empathy (SEE) developed by Wang et al.'s (2003) and adopted to Turkish culture by Özdikmenli-Demir and Demir (2014) is used to collect data from participants. Results will be discussed in terms of developing multicultural ready schools and training teachers with high level of ethno cultural empathic understanding.

Keyword: Ethnocultural empathy, teacher candidates, education



A Content Analysis of Virtual Reality Studies in Foreign Language Education

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The use of Virtual Reality in education has been highly popular in recent years. Virtual Reality (VR) can be defined as computer generated artificial worlds or immersive environments in which learners explore and interact with. The basic idea of VR is to give the impression and feeling of being somewhere else by tricking our brains in an artificial sensory world. In nearly every domain of education, integration of Virtual Reality has been achieved. The use of Virtual Reality in foreign language teaching and learning is one of these. Virtual Reality in foreign language teaching and learning is now further extended by the provision of current technological means. There is a huge shift in teaching and learning facilities from conventional classrooms to interactive ones. In the light of recent studies it seems quite reasonable to use virtual reality in learning and teaching foreign languages. What makes Virtual Reality special in comparison to other technologies are immersion, interaction and involvement properties. The purpose of this study was to analyze the studies on foreign language learning and teaching through virtual reality technology and highlight the current trends on this topic, thus propose some suggestions for future researchers of this field. Document analysis method was used in this study. Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin&Strauss, 2008; seealsoRapley, 2007). 40 research papers published between the years 1995 and 2015 were scanned in terms of data collection tools, research design, sample, sample size, data analysis method, and the topic of the paper. By conducting this study it was aimed to answer the following questions: Which topics were frequently studied in these research papers, what data collection tools were frequently used, which research designs were frequently applied, what were the types and level of samples, and sample sizes in these research papers. The results of the study revealed that document analysis was in the first place in terms of data collection tool and half of the studies were qualitative. Interview, achievement tests and alternative instruments are not used in the studies on their own. In addition, undergraduate population was primarily the focus of attention. Elementary, secondary and high school sample populations are lower compared to other populations. As from sample size, 101-300 size was primarily used. Moreover, effectiveness of virtual reality and game-based learning were the two outstanding topics of these studies. It is also seen that there is a gap in the literature about language teaching and learning by means of virtual reality in the area of CALL and social networking. Consequently it is seen that more studies should be conducted in the area of virtual reality and foreign language teaching and learning. Current studies conducted in this area show that when used properly, Virtual Reality can enhance foreign language learning to a great extent. However this meta-analysis shows us that the capacities of Virtual Reality have not been utilized adequately in foreign language teaching and learning facilities. It is hoped that this literature review will shed light on for researchers for the following studies.



Keywords: Language learning and teaching, virtual reality, VR in language education, technology



Integrating Edmodo into Foreign Language Classes as an Assessment Tool

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Due to the everlasting and rapid developments in educational technology, teachers are in search of exploring innovative techniques in order to promote today's students' involvement in foreign language learning process. The reason for this is that today's students are regarded as digital-natives who are difficult to motivate if modern technology they are familiar with is not utilized effectively in the classes. The absence of recent technology in classes may turn the learning process into a dull and mediocre activity. When it comes to the assessment part of this process, the situation may become worse as most of the students feel unwilling and reluctant to be assessed. Therefore, the current study is important in that it presents an innovative way of assessing students' skills they gain during language learning. For assessing students' language skills, the study introduces Edmodo, which is an educational social network providing a secure learning platform for learners and educators. It may be an effective tool with its user-friendly and practical aspects. Being a web-based online technology, Edmodo allows students and teachers to post materials, share videos and links, grades, notices, and assignments. With its practical interface, it resembles to other popular Course Management Systems (CMS). It enables teachers to work with their learners in real time, and can be used either in the class or at home. Thanks to a special code assigned for a particular group, students can interact only with their teachers and each other, which makes it secure and safe in use. In addition, parents can have their own codes to check or work together with young learners in particular. The current study is a descriptive one focusing on how to integrate Edmodo into foreign language classes as an assessment tool. The main objective of the study is to introduce the implementation of various assessment applications through Edmodo and offer some suggestions. To this end, accounts of previous experiences and some reflections of students are presented. 62 students attending English preparatory classes in a state university in Turkey participated in various assessment activities through Edmodo during 2014-2015 academic year. Reflections of the students regarding the use of Edmodo as an assessment tool were obtained through semi-structured interviews conducted by the researcher. The results indicated that most of the students found Edmodo to be funny, motivating, user-friendly, and practical. They also stated that Edmodo reduced their test anxiety to a great extent and they would prefer to be assessed through Edmodo rather than traditional assessment techniques like pen-and-paper tests.

Keywords: Assessment, Edmodo, Course management system, foreign language classes



How Do Teachers Notice Students' Ability to Use and Understand Mathematical Language?

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This study not only focused on investigating seventh grade students' use of mathematical language correctly, but it also focused on teacher noticing—making sense of events—in the setting of being able to make sense of students' thinking and the ways of how they used mathematical languages to convey their thinking. For this purpose, we work with three seventh-grade students who demonstrated different achievement levels in mathematics and their math teacher participated in this study. We used student journals and student interviews in order to investigate students' use of mathematical language while we used teacher logs and teacher interview to investigate the process of teacher noticing. Grounded-theory approach guided the analysis of the data. Each interview was transcribed interesting issues regarding students' use of mathematical language and teacher noticing were summarized. This study demonstrated that students tended to use mathematical language regardless of their academic achievement, which was also noticed by the teacher.

Keywords: teacher noticing, mathematical language, concepts of area, geometrical reasoning



The Examination of Free Time Activities Corurse's Goals According To The Teachers' View

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This research is a descritive study which is a type of general screening to determine Free Time Activities courses' goals accordingly instruction of Ministry of Education ,teachers' belief about this course aim and the relationship of this belief with various variables. 694 primary school teachers who work city centre of Ağrı in 2011-2012 educational year are population of this research. 300 primary school teachers who were sample of this research were chosen by using random non-portional method from 20 primary schools. In this research, researcher used Free Time Activities Course Evaluation Scale which is developed by expert. It was recognized that the great majority of primary school teachers use Free Time Activities course to complete missing gain other courses although practice exam, preperation of examination and catch up education are forbidden during Free Time Activities course according to Board of Education and Discipline's Bulletin. A large amount of primary teachers indicated negative view about the efficiency degree of the course. Meaningful relationship is determined with degree of serving course purpose between teachers' seniority and educational status.

Keyword: Free time, free time education, free time activities, free time activities course.



Examination of Teacher Candidates' Environmental Literacy Levels

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The purpose of this research is to determine teacher candidates' environmental literacy levels and to examine in according to take department and environment course.

This research is based on descriptive research model. Environmental literacy scale were applied to teacher candidates. The study was performed with the participation of teachers candidates studying in Faculty of Science Teacher Education, Elementary Education, Early Childhood Education and Turkish Education programs of Amasya University during 2013-2014 academic year.

One of the biggest problems of today's world is environmental issue. The environmental issues are global problems bacause we share the same atmosphere and the same earth. Therefore, the solution of environmental issues concerns all over the world and all nations . The most effective and permanent solution of environmental issues is education. It is necessary to give the environment education in chilhood to make more effective and permanent. at this point, teachers play a key role in environmental education. That the next generation has environment conscious, environmental sensitivity and love of environment is in the hands of teachers. For this, it is essential that the teachers has primarily environment conscious, environmental sensitivity and love of environment. This study is so important that it was made on these issues. A study was done on teachers candidates' interests in environmental knowledge, attitudes towards the environment, environment-related usage and environmental issues on the scope of the study and environmental literacy levels were determined. Some proposals have been developed on behalf of reaching sufficient levels in order to educate environmental literate individuals. It is seen that there are no enough studies in reviewing the environmental literacy literature. This study is also important to contribute to literature.

Within the scope of study, environmental literacy scale consisting of knowledge, attitudes, usage and interest dimensions was applied to teacher candidates. 5-point Likert-type questionnaires were used in attitudes towards the environment ,environment-related usage, environmental interest domains. The data obtained from this study were analyzed with SPSS 18.0 statistical software.

According to results, it was found that teacher candidates environmental information levels are insufficient but environmental attitude, usage and interents levels are at desired level. Moreover, it was determined that while there is no significant difference in environmental knowledge levels according to gender, there is significant difference according to studies departments and take part in the environment course. It was stated that there is no significant difference in teacher candidates' attitudes towards the environment scores according to



gender, studies departments and take part in the environment course. While a significant difference wasn't found in teacher candidates' environment-related usage scores according to gender and take part in the environment course, it was determined to be significantly different according to studies departments. It was stated that there is a significant difference in teacher candidates' the environmental issues scores according to gender but there is no significant difference according to studies departments and take part in the environment course.

Keyword: Environmental literacy, teacher candidates, environmental education



Tool of Association Concept; Volume Of Concept

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Concepts are the building blocks of science. Concepts which are the most important element in structuring the information are units of our thoughts. Educators, for the understanding of relationships between concepts; Concept maps, Concepts network, Meaning (Concept) Analysis Table, The Roundhouse and Set of Concepts were developed and are using them widely in education. Concepts of science are increasing the ratio of students to associate these concepts with different methods, techniques and tools. The importance of the concept tools is great in the learning of concepts. Education of the concept would be useful if different concept tools are developing. Purpose this study; concept tools which advantage volumes of the atomic elements were prepared for determine the relationship between concepts. This concept tools was inspired by the science subjects in the preparation. Method; in this study, tool of association concept has been developed. Volume of atomic elements assembly using for provided knowledge about the elements and electrons in the 7th and 8th grade science class students. The volume of elements is provider of achievement information about the element. The electron of element which advantage the sort in a specific order are specified volume of matters of education. Units in science lessons even the concept of subject which specifies number of concepts and the relationships between them in unit or topic can be presented in a specific order. In here, the unit (subject) name writeable instead of the core of elements and concepts writeable instead of electrons. The following process steps use is recommended while volume of concepts preparing. For volume of concepts; (1) determined unit or subject, (2) determined the main concepts of the subject, (3) determined the sub concepts of main concept, (4) Gradually, determined the below concept of sub-concepts, (5) drawn the central and layers of the volume of concepts, (6) According to the concepts and relations between them is drawn oval boxes on the volume of concept layer, (7) used the arrows for to determine the relationship between the boxes in layers, (8) written the concept on the box in the layer, (9) Available the dashed lines to prevent complexity. Volume of concepts used to determine relationships between concepts in the subject. Additionally; (a) increase the importance of the concept when hinterland External to inward, (b) can be analyzed in depth the subject, (c) can be used to summarize the subject, (d) can be may make simpler the subject. Results; It was added a new tools of association concept when existing. New and original a concept tool was obtained. It is named "volume of concept". Thanks to these tools the concept can be specified in a unity. Depending on the relationship between concepts, it is provides more collective appear. Volume of concept was prepared without the cost. Advice; volume of concept can be tested for applications in education. Its format can be prepared in computer for students who forced the drawing. It investigated the effect on learning.

Keyword: Concepts, concept map, volume of concept.





Augmented Reality Technologies and Fields of Use.

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The main aim of this study is to explore augmented reality world. AR technologies and platforms on which AR applications can be developed, and fields of use of it are investigated in this paper.

AR (Augmented Reality) is a system which combines real and virtual information in real time environment. Virtual information is generated by computer and it is overlied on a physical objects. There are there basic principles for applications in order to be considered as a real AR application. The first is that there has to be a combination between real world and virtual elements. The second is that this interactive combination has to be in real time. The last one is that the real world and virtual elements have to be registered in 3 dimention. If any of these there elements is skiped, the application is not AR app anymore.

Augmented reality technology has been used in a number of fields for decades. Military, medicine, maintenance and repair applications, psychological treatments, engineering design, tourism, museums, gaming can be counted.

For instance, German vehicle company BMW developed an AR application for their car maintenance and repair. When serviceman wears an AR glasses and look at the motor, the app exposes additional virtual information to help him in order to diagnose and solve the fault. In architecture, AR systems can be used to allow designers, workers and prospective customers to visualize and experience a virtual construction as a real.

In educational settings, there is a wide usage area for AR technologies. AR supports seamless interaction between real and virtual environments; users may use a tangible interface metaphor for object manipulation, AR allows transition between reality and virtuality. These facilities make AR apps helpful for education.

For instance, in math class, teacher and students can collaborate by interacting with each other on shapes. Interactive 3D shapes which are generated by AR app allow students and teacher study it collaboratively. And so, in geometry class. Physics is another area where AR can also be used. In order to demonstrate various kinematics properties in virtual environment such as velocity and acceleration, AR apps are exactly necessary. In augmented astronomy lab, students can learn about the relationship between the earth and the sun. AR technology with 3D rendered earth and sun shapes may be employed by educators for students' understandings of the space objects.

There are a number of platforms that can be used in order to develop and use AR apps. Some of these are completely free; some of them are for charge. For instance, buildAR which is launched in 2009 (https://buildar.com/) overlay your content on the real world. One can adopt



it throughout the education and training, advertising, arts & culture, entertainment and government sectors. There is another buildAR (http://www.buildar.co.nz/) which is a tool for building Augemented Reality scenes with no programming required. It provides a live video view with 3D virtual models on images and markers. ARSight is an Italian company which allows a simple and astonishing way of integrating digital content in real world. FreshAiR (playfreshair.com), Hoppola Augmentation (hoppala-agency.com), TaleBlazer, 7Scenes (7scenes.com), Junaio, Metaio, Layar (https://www.layar.com), Daqri (www.daqri.com) ZooBurst (www.zooburst.com) are some of them.

In this study, augmented reality technologies, fields of use, softwares and hardwares for developing AR applications are examined and introduced thoroughly.

Keyword: Augmented reality, education, technology



Innovative, Dynamic, Explorative And Active Teaching Of Some Mathematics Subjects: An Experimental Study

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The success of the Constructive and Cognitive Models depends on the effective designation of learning process by Inquiry Based Learning Model involving five critical steps such as constructing a suitable model, collecting data from the model, predicting relations among the data, generalizing the relations and evaluating [1]. Iste.org declares that innovating education goes far beyond just learning how to use new tools. It requires us to rethink how we teach and learn [2]. However, there isn't seen enough modeling application on the programs. Thinking mathematically and expressing with the mathematics language have the first degree positive effect on qualified learning via dynamic modeling [3]. If we redefine the learning concept as "learning is a mental transformation of a model of the problem to the dual coded mental image", then the main purpose of this study ought to reveal the effects of IBLPS model and multimedia tools and interactive materials on the learning process of the students. Mathematical modeling provides the opportunity of presenting information in different ways, NCTM 2000 [4], Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments, ISTE NETS-T points out and focuses on constructive and innovative learning approaches [5]. Mathematics Programs 9-12 declare that "Learning Environments ought to involve the Computer Algebra Systems (CAS) and interactive programs and instructional materials, MEB-TTKB 2011 [6]. ASSURE Model points out that The Instructional Systems Design (ISD) process is one in which teachers and trainers can use to design and develop the most appropriate learning environment for their students (7).

The samples of the study consist of 171 prospective teachers randomly selected from the N.E.Ü. Faculty of Education Department of Mathematics and 99 high school students. Data were collected using the Dynamic Modeling Activity Scale (DMAS) with 5-point Likert type ten questions and 7 open ended items. Reliability of the scale is found as 0,9165 and 0,8695 respectfully by the pretest and posttest. The findings were analyzed by using the Paired Sample Statistics T Test and correlations of a statistical program.

Based on the statistical analysis, multi teaching environments with multimedia tools and Dynamic Interactive Instructional Materials are predicting the following learning outcomes:

meaningful and sustainable learning predicted in 0,76 percent, students' participation to the lessons in 0,74 percent, mathematical thinking and reasoning predicted in 0,77 percent satisfaction of learning outcomes predicted in 0,613 percent, discovering relations among the data predicted in 0,77percent. From the statistical finding above, it can be suggested that prospective teachers ought to have competencies on multimedia tools and active teaching of mathematics.

Keyword: Inquiry based learning model, classroom activities, dynamic modeling, meaningful learning



Learning Difficulties and Use of Visual Technologies in Learning to Program

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In recent years, programming has been seen as a promising career with great earning potential. Rapid growth and use of computer technology give further emphasis to programming. Therefore, faculties open programming courses ranging from introductory to advanced levels. Primary and secondary schools also started to include programming courses in their curriculum.

However, in the literature, it has been widely accepted that learning to program is a challenging task for students. Studies conducted on programming education show that significant number of students fail the programming course or get low grades. Of the reasons why students have problems in programming, necessity to possess variety of knowledge while dealing with the programming exercises is mentioned most in the research. These are syntactic, conceptual and strategic knowledge. Other reasons involve lack of motivation, lack of skills required for the programming, lack of mathematical knowledge and unfamiliarity with the programming courses.

This is a literature review study that discusses learning difficulties of students and visual technologies used in programming courses to overcome problems mentioned above. This study examines technologies such as Scratch, Alice, Blockly, Jeliot and Ville. The properties of these technologies, how they can be used in programming and results of research studying the effectiveness of these technologies are also discussed.

Keyword: Difficulties in programming, visual technologies in programming, Scratch, Alice, Blockly, Jeliot, Ville.



Issues Related To Virtual, Augmented and Mixed Reality Environments and the Conceptual Confusion Arising from the Environments

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In the light of the developments in the contemporary information technologies, we have often heard of the concepts of Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR). In particular, the investments of Facebook in this regard by buying Oculus, which manufactures virtual reality headsets, and then the calls of the large companies such as HTC, Sony, Samsung, Microsoft, Google, Canon for the products for 3D virtual environments have turned out to be strong indicators regarding the future of these three concepts. However, several reasons such as the lack of experts, the inability of the development tools to keep up with the requirements, and the expensiveness of the equipment to test these environments bring about certain issues in these 3D environments, which are still in its infancy. Moreover, many do not have sufficient information on VR, AR and MR. Even though the presence of a 3D environment is apparent, there are still issues which of the concepts of VR, AR and MR can characterize that environment. Particularly when the virtual and real environments coexist, people experience that kind of confusion more frequently.

There are two objectives in this study: the first is to investigate the concepts of VR, AR and MR in the light of the studies in the literature, to examine the current technologies, and to reveal the available issues related to these environments. The second objective is to eliminate the conceptual confusion regarding VR, AR and MR through the examination of the studies in the literature.

The study, the data of which were obtained by means of descriptive survey model and then interpreted, reveals the issues related to VR, AR or MR and thus eliminates the conceptual confusion in regard to these environments. Therefore, it was concluded that the study would offer an insight for the researchers interested in the field.

Keyword: Augmented reality, virtual reality, mixed reality



Elligibiliyt to Material Design Principles the 6th Grade Science and Technology of Course Videos Which Are Located On Education Information Network (Eba) Platform

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One of the most effective ways of making permanent the results obtained from the training activities is the training materials is used to address different senses. The quality of the training will be given at the highest level of prepared training materials will need to be appropriate in terms of certain such as time, budget, usability. Thanks to technology that records continuous improvement of our age, prepared educational materials are more able to cater to different senses. For example, simulation class, which from today's digital educational materials can offer the possibility almost real-life equivalent facility of the educational environment to us. Educational materials developed in the digital environment is more advantageous than printed materials, when evaluated on criteria such as time, budget and performance. Reproducing and distributing digital educational content and sharing of materials is also very easy such as it can be used repeatedly. The important thing is this information stack by making a tidy to allow everyone to benefit from accurate information.

Turkey, the country's education system is taking various steps to ensure that this knowledge and technology to keep up with age, "FATIH" (Increase Opportunities and Technology Improvement Act) with the project name. The Ministry of Education has undertaken many innovations within the scope of the Fatih Project. One of them <www.eba.gov.tr> is addressing Education Information Network (EBA), sharing platform which is available to students and all teachers. EBA web site is functional site that providing e-content teachers and allows the file sharing and offering the opportunity to be able to follow the innovations occurring in education.

The purpose of this study is to evaluate instructional fitnesses of 32 educational videos (the 6th grade science and technology of course videos) which are located on Education Information Network (EBA) platform, according to some criteria that consisting of preprepared material design evaluation principles, by content analysis. Education Information Network designed by Innovation and General Directorate of Educational Technology is a social platform where you can find the correct e-content is examined.

EBA site which has registered users with a total of around 310 thousand and nearly 61 thousand educational e-content is the case of a rich sites in terms of both number of users and content. So, the frequency of use of the site is expected to be intense. In this study, the videos on the site that aimed to determine what level of educational coherence. Moreover, e-contents on the site that aimed to learn what level it serves the purpose of site.



In this context, some coding is performed according to the criteria developed in the form of material design principles. This encoding is performed by itself one of the relevant experts and researchers. The percentages of categories and frequencies were calculated. According to this, situated videos' on EBA platform were found to match overall, prepared by the Ministry of Education and Science and Technology course subjects. It was asked which are prepared in accordance with the design principles of educational video materials through developed material design principles evaluation form to 10 field experts. It has been found to meet the design criteria of the clip.

Keyword: EBA (Education Information Network), Educational Video, Science and Technology, Materials Design Principles.



A Thematic Reviewing On Master's And Doctoral Thesis Which Made In The Field Of Computer And Instructional Technology Training In Turkey In The Last 5 Years

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The results of scientific research in all scientific fields has an important place to give direction to the practices and policies in the relevant field. Obtained results a basis for applications to be realized. Also includes a guide to practitioners their professional activities in the field, too. Results of scientific research in the educational sciences is very important terms of curriculum books, encyclopedias and handbooks (handbook) content as a source of work prepared for publication. The number of educational research in the last ten (10) years is observed a large increase which plays an important role in shaping the field of application will continue. While some of this published research as the basis for education reform some studies also, the results of previously conducted studies that are testing whether reliable.

Knowing the content of the graduate programs in science have opened, scientists engaged in research related to areas such as the way to move the pointer to a character, also it will contribute greatly to the development of related disciplines. Information Technology and Software course teacher training aimed at universities "Computer and Instructional Technologies Department", the quality of graduate programs is very important. For this purpose, master's and doctoral programs in different universities in Turkey are conducted. The execution of the graduate program and the content of the thesis and the examination made in terms of quality and the question of to what extent these pathways that can contribute to scientific development in universities, may give direction to the existing lighting conditions, as well as future research and investigation policies will be followed.

Applied scientific investigation, the sharing of research and study, it is important to be able to provide transmission and contribution. Open scientific research, clear, understandable and is expected to be particularly original. Otherwise similarities with each other, devoid of originality, scientific studies will emerge that can not make any contributions to the literatüre, will attract the attention of other researchers and practitioners. Scientific research by searching solutions to existing issues and problems, what to do, how to do and what he should be able to reveal the findings.

This research shows significant, Computer and Instructional Technologies Department made the field of graduate and doctoral thesis and dissertation topic to determine the distribution of thematic studies to be carried out after him, and as they affect the methodological aspects. The survey results are seen as very important, as noted in case of problems to be investigated in the same subjects as compared with the results of studies conducted in other countries,



towards eliminating the obstacles in international journals and reference potential of the country's Computer Education and Instructional Technologies in terms of providing a development

The purpose of this study is to determine general trends in the type and terms of method, Computer and Instructional Technology Education in the last 5 years in Turkey (2010-2014) made the master's and doctoral thesis analyzes the thematic tendencies and investigate issues. This study used qualitative research methods, descriptive (screening) working model has been adopted. The universe of study consists of master's and doctoral thesis carried out in the field of Computer and Instructional Technology Education in Turkey between the years 2010-2014, and aimed to investigate the entire universe in this study.

Within this study, in order to determine the thematic structure trends, the form is used to determine the thematic structure. The data were obtained through developed thematic structure determination form. Analysis of the data obtained in step, frequency and percentage analysis of the kind of content analysis techniques were used.

Keyword: Computer Education and Instructional Technologies (CEIT), Master (M.Sc.), Doctorate (Ph.D.), Thematic Review, Thesis.



The Examination of Secondary School Student's Social Media Usage in The Context of Social lives

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Social media tools attract the attentions of people of all ages because of providing the ability to write and share information to users, supporting interaction between users and multimedia features. Considering the developmental features, secondary school students (10-14) are important target audience. Social media positioning a major determinant on relations especially for children in this age group. In this context, social media usage status of middle school students and the impact on the social lives were aimed to be determined. In 2014-2015 academic year, data was collected from students located in Ankara Sincan county whom indicated using social media. As a result of research, it is found that students regularly used social media every day, used social medya up to 1 hour or a period of 1-2 hour, prefered Facebook, Twitter and Youtube as a social media tool and they firstly aimed learning, entertainment, spending time and communication while using social media. In terms of communication, social media is seen as a source of information and communication with friends, to be noticed is a substantial purpose for using social media by students. In terms of in-family communication, social media is not seen as a significant communication tool while classic communication is prefered with in the family. In context of school and lessons, social media is seen as a part of teaching, isn't thought to has negative aspects. Finally, social media is not seen as determinant on students' lifestyles.

Keywords: social media, secondary schools students, family, friends, communication, social life



Development of Mobile Learning Material for 9th Grade Physics Course To Use in FATIH Project: Force and Motion Unit

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Curriculum and course books have an important role in teaching process. But they are not sufficient as course materials on their own. It is known that Information Technologies make big impacts on teaching process. As these technologies have become mobile today, it is a necessity to develop and use mobile learning materials. In FATIH project it is aimed to enhance the information technology infrastructure and students to have technological tools. But in the project process, the lack of materials which students can use, is remarkable.

In 2013 several modification has been made in curriculum and it was aimed to form teaching environments which is acquisition based and which have been related to daily life. In this context lack of laboratory environments in which students can attend mentally and physically, the difficulties in learning abstract notions and facts can affect the retention in learning. These deficiencies are especially seen in Physics courses. In literature, several studies state that students tend to face some difficulties in learning process of force and motion subjects. So these subjects have been selected in these research.

Lately usage of mobile phones and tablet computers is increasing. As a result of this using Internet usage in mobile devices has been increased. Increase in mobile internet usage led to developing with different tools than traditional web sites uses. In this context instead of traditional web pages, developing and using mobile applications is inevitable.

In order not to develop different applications for different mobile devices, developed application must contain only one content set. Especially it must be taken into consideration that different visual content can be shown different in different mobile platforms. So developing environments which can turn to HTML 5 and which can apply to all platforms must be chosen.

It can be said that learning can be quite effective, easy and permanent when the activities can address to multiple sense organs. To address multiple sense organs, learning environments must be compatible with information technologies. In FATİH project it is aimed to distribute tablet PCs to all students. But lack of material which can be used in tablet PCs can be a problem. In this research, it is aimed to develop acquisition based content for force and motion subjects which can work in all android based mobile devices.

Developing mobile content process consists of 3 basic levels. These are: design, develop and publish. Each level is split up into own work routines. In design process, especially writing scenario and designing storyboard are essential steps of work routine. In developing process



different methods and tools can be used. Producing products for both mobile applications and for internet is a preference criteria in choosing developing tool.

Mobile content can be prepared by basic programming knowledge. For these content software like "Adobe Flash", "Creative Book Builder", "TouchAppCreator", "EduCreation", "Explain Everything" can be used. In this research acquisition-based mobile contents of the unit "Force and Motion" which is included in the curriculum of 9th grades are prepared using "Adobe Flash CS6" software. This application will be the first and an example for other units. Developed content was used by teachers and students and their opinions has been taken into consideration.

Keyword: Mobile learning, development of material, fath project, force and motion subjects,



The Use Geographic Information Systems in Teaching Geography and Social Studies Courses

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This paper presents the results of a scientific research project, which was supported by the Sinop University and done in collaboration with the Sinop Department of Education, about the use of geographic information systems (GIS) that is increasingly started to be used in educational environments as an important educational technology tool. Participants of the project are thirty seven (37) geography and social studies teachers who are working in the middle and high schools in the central Sinop. In terms of sampling for the study, all the geography and social studies teachers participated in the project due to collaboration with the Sinop Department of Education. Among the purposes of the project are: What the GIS is; what the components of GIS are; what the open-source GIS software is; what the internetbased GIS is; and how to use geographic information systems while teaching geography and social studies courses. The project took place in the computer laboratory in the Faculty of Education at Sinop University and lasted for five (5) days. Semi structured interviews with open ended questions and tests were administered to the participants before and after the study. Upon completion of the project, each of the participants was given a certificate of attendance. As a result of the study, it was seen that majority of the geography and social studies teachers do not use the GIS while they teach their lessons at schools. The basic reason for that is the lack of knowledge on how to use and incorporate GIS into their lessons in addition to the inefficient internet connection at their schools.

Keyword: Geographic information systems (GIS); open-source GIS software; geography education, social studies education



Online Interpreter Training Using the Community-of-Inquiry Framework

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Australia is a country made up of immigrants. Roughly 25% of its population is born overseas, manifesting in its highly multicultural and multilingual social fabric. Under its egalitarian social policies, citizens have the right to access government services regardless of what language they speak. This is where public service interpreting comes into play for those who have language barriers when accessing services. These citizens are entitled to free interpreting service, and the government has a duty in providing qualified and trained interpreters.

RMIT University has 40 years experience in training interpreters and translators. In response to the advancement of communications technology in this digital age, interpreting pedagogy has a lot to gain from adopting a well-designed online learning framework for delivering online training. This is particularly important in addressing the lack of interpreter training in regional and rural areas in a vast country like Australia.

This paper reports on the delivery of Diploma of Interpreting at RMIT in the Dari language (spoken in Afghanistan) in 2013. Most students in this language stream arrived in Australia under a humanitarian visa. Two concurrent cohorts of Dari students undertook the training. One group was based in metropolitan Melbourne and attended traditional face-to-face classes, and the other group was located in rural Victoria and received the training via an online learning platform with weekly video conferencing support. The teachers teaching in these two modes were exactly the same, and the course content covered was same via the two modes as well. The course design for the online cohort uses the Community of Inquiry framework by Canadian online teaching specialists Garrison, Anderson and Archer (2000), which consists of social, cognitive and teaching presence.

At the conclusion of the training, a survey was administered on the two cohorts of students with an aim to gauge their perception of the three elements under the framework in their specific learning mode. The findings indicate that the students' perceptions of social, cognitive and teaching presences were high in both the face-to-face and online modes, and that a community of inquiry successfully developed in online learning as well as face-to-face learning. The results do not indicate any major difference between the two modes in the development phases of a community of inquiry or any clear advantage of one mode over the other. This points to that integrating learning activities based on the elements of the Community of Inquiry framework—rather than delivery mode in which they are presented—is crucial.



The contribution of the research is that the Community of Inquiry framework is a viable methodology for instructional design for interpreter training programs in an online environment and that a Community of Inquiry can be developed as effectively as the traditional face-to-face learning environment. As learners become more geographically dispersed and linguistically diverse, using a Community of Inquiry course design provides a feasible solution as interpreting education strives to offer more innovative, effective and sustainable training in a digital era.

Keyword: Community of Inquiry; interpreter training; translator training; online learning; interpreting pedagogy



The Effect of Digital Storytelling Application on Student Opinions about Cloud Computing

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The use of technology has become indispensable in today's learning environments. In this context, many new technologies have been introduced to students as educational technology. One of these technologies, cloud computing has been employed as an educational technology.

Everyday people wish to access the information they need anytime and anywhere, and they want to carry out their work. Need for accessing, sharing and processing information regardless of time and space has increased, and within this context, this has led to cloud computing technology (Sarıtaş and Üner, 2013). According to the definition by American Institute of Standards and Technology (NIST), cloud computing is a technology providing convenient network access to manageable computer resources such as network, server, storage, application and services. Today, cloud computing technologies are used in various fields such as communication, transportation, application development, games and entertainment, health, and business. When considered that education is of great importance in every era and its technological demands have been increasing, it can be stated that the use of cloud computing has become a must to boost the quality in education (Sevli, 2011).

In research related to the use of cloud computing for educational purposes, it has been demonstrated that the thoughts and opinions of students on this subject who will use this type of learning environments are valuable (Cheng, Huang and Lin, 2012; Cahill, 2011; Agcaoili, 2012; Ellison and Arora, 2013; Erdemir, 2014). With the increasing use of cloud computing, it has been thought that student opinions and thoughts on cloud computing applications and cloud computing will help how cloud computing will be used in education. With this respect, knowledge of the subjects students care about cloud computing is significant. It is predicted that digital storytelling can be utilized in revealing the areas which students focus on. Indeed, Pelayo (2013) reported in a study that digital storytelling allowed different points to be revealed with the help of each individual's own thoughts and creativity.

According to Meadows (2013), digital storytelling is short stories created by students using visual, audio, and audio-visual multimedia possibilities (Meadows, 2003). Sawyer and Willis (2011) stated that the use of digital storytelling was effective on the thoughts and behaviors of students with respect to both story-makers and audience. Sadık (2008) presented some opportunities on how digital storytelling could be used in education more effectively using appropriate tools.

With this purpose, this study aimed at revealing the changes in students' views on cloud computing technologies whose use has been increasing everyday, and determine the effect of digital storytelling on student opinions about cloud computing by investigating whether digital storytelling make a difference in student opinions on cloud computing. The study



group was made up of 19 students taking cloud computing technologies course in a vocational higher school computer technologies department. An integrated research design consisting of a single group pre-test/post-test experimental design and qualitative data was used. "Cloud Computing Questionnaire" (Changchit, 2014) and the digital stories created by the students were used as data collection tools. The data were analyzed using paired sample, t-test and content analysis methods. As a result of the research, it was determined that digital storytelling activities did not generally have a significant difference in student opinions about cloud computing, however that they created a significant positive difference in usefulness and ease of use sub-factors. It is also among the results of the study that students generally focused on the benefits and ease of cloud computing in digital stories they created.

Keyword: digital storytelling, cloud computing, student opinions, effects of digital storytelling



Investigation of the Development of ReflectiveThinking Ability in Teaching of Pre-Service ScienceTeachers

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The main aimof thisstudy, while helping teachers to teach their reflective thinking development, the teaching-learning process is to determine the development of reflective thinking at everystage.

This study was designed in the form of action research due to the feature of the cases examined. The participants were at Bayburt University Faculty of Education Department of Elementary Science Education Department's' the academic staff and four pre-service science teachers. In this study, the data collection tool were used video recordings, semi-structured interviews, self-assessment forms and reflective journals. Theworking group's research qualitative data obtained from the pre-service science teachers were analyzed using content analysis.

Located science teachers in the study group reveals that they provide the level of development of reflective thinking of the majority. However, the work of reflective thinking, planning a course for science teachers participating in this study was shown to contribute to the professional development for instructional practices. The work done to improve the process of reflective thinking of science teachers is determined to have a level reflecting the start of the technical field. At later stages of the processpre-service science teacher are determined level of application and critical reflection levels. In this context, experience of pre-service science teachers and reflection on these experiences provide that professional development for instructional practices. Science teachers at the beginning of the relevant period to developing reflective thinking, teaching methods and reflect on instructional materials literally could not pass. In the following phase, the teachers of the course content, teaching methods and materials is seen that they provide to choose the appropriate development. In addition, teachers are reflective practices starting in use by them teaching methods, techniques and materials sufficient While teaching methods they use reflective practices increases, preservice science teachers, the techniques and materials were determined to produce enough vision that they and alternatives. Pre-service science teachers in the final stages of reflective practice teaching methods, have made specific implications for the technical and educational materials, and have demonstrated generalizations. In addition, the application of science teachers when student candidates instructional methods and materials used is associated with daily life has created awareness in a more efficient learning from the teachers took place. Preservice science teachers gains relevance of course content materials, material utilization by demon- strate improvements in designing various visual materials have been shown to make progress on the spot and thus make learning more meaningful for students.



Pre-service science teachers, they give importance to the ideas of the students during the application made for reflective thinking skills, it has revealed that they plan to practice paying attention to students' interests and desires. Pre-service science teachers, students supporting them to express their thoughts on the point, it was determined that the application by designing efforts in this direction. In addition, pre-service science teachers in later stages of the implementation process, enabling the active participation of students in classes is observed that ensure the realization of meaningful learning. Pre-service science teachers to plan interesting activities and applying, students were found to be successful in providing the motivation towards the course has been reached. Pre-service science teachers interested in fun and engaging activities within the facilities they have, it is determined that the edit using reflective thinking skills. Accordingly pre-service science teachers with the applications made to develop reflective thinking skills on different issues and conditions specific to convert an enjoyable lesson plans for students while they are designing teaching practices

Keyword: Reflective thinking, reflective thinking levels, preservice science teachers, professional development.



The Effect of Using Simulators in PLC Training

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The usage of control and automation technologies in the production process is increased with the rapid increase in industrial production. PLCs (Programmable Logic Controllers) are one of the most important control and automation equipment. Therefore, the need for technical staff who are experienced in the setup, programming and maintenance of PLCs has increased. Equipment and test kits used in the training of this technical staff are quite expensive and require large physical areas. In parallel to the developments of technology, PLC training with simulation software becomes very important, so PLC training becomes more economic and safety. In this study, the experiment group of 25 students received PLC training with PC_SIMU process simulator whereas 25 students in the control group were trained in the traditional method. The participants are students who are in the second year of the department of Electric at Technical Sciences Vocational School of Amasya University. Then, a questionnaire has been applied to the students at the end of the training and both qualitative and quantitative results show that PLC training with PC_SIMU simulator was significantly more effective than the traditional method.

Keywords: programmable logic controller, simulator, PLC training.

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Investigation of Vocational High School Students' Perceptions of Distance Education in Terms Of Different Variations

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Distance Education provides opportunities for presentation of education at suitable place and time, providing flexibility in planning and helping taecher in dealing with students more individually by facilitating tasks such as repeating courses and giving feedback. Distance Education is coming into question day by day with these useful aspects and it is being discussed how effectively this process can be used as research topic in educational levels. Depending on the discussions, with the aspect of positive effects, especially in universities "Distance Education Centre (UZEM)" units are being established and education is carried out through this infrastructure. Vocational High Schools, a division of the Universities, represent a large mass in higher education in our country. In this context, to determine students' perceptions of distance education can move an advice in terms of applicability of the distance education. In this study, it is aimed to detect Vocational High School students' perceptions of distance education in terms of variables such as gender, class, department, program and the existence and application of information and communication technologies, etc. This sample is formed by 144 female, 658 male, including 802 students at Ordu University, Technical Sciences Vocational High School. Data was collected with "Distance Education Perception" scale that has been developed by Gündüz (2013) and of which the reliability co-efficient is 0,84. The obtained data was coded with the help of SPSS-22 software package and all evaluations was carried out $\alpha = .05$ level of significance. According to the findings obtained in this study, the perception of distance education students of vocational high school; gender, department, having personal computers and the presence of internet access facilities were statistically found significant. While it occurs that male students' perceptions of distance education are more positive than female students, students at computer programming than other departments, students who have personal computer and internet than who have not, it is determined that perception of distance education did not differ statistically. It is considered that, at vocational high school, courses' having the technical specifications, the different working environments among other departmens except for computer department, the need for computer and internet for convenient access to distance education affect the perception of distance education. Due to the time and place independent properties of distance education, the perception of distance education is not affected either students get education day or night, at the same time, having experience with distance education courses previously did not cause a change in their perception of distance education. The existence of differences for these results or planning new researches on other variables that might be affective will bring contributions to taking measures for the process to be more qualified and thus changing the perception of distance education in a positive direction.

Keywords: Vocational High School, Perception, Distance Education



Using Dynamic Environments in Foreign Language Teaching

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With the advent of virtual environments foreign language education, challenges and opportunities for innovative teaching and enhancement of student learning can be conducted more efficiently. What is important to this process is the use of strategies to foster transfer of knowledge generation dispositions from teacher to learner. The concept of leveraging strategic control of the knowledge from teachers to students in virtual learning environments functions as the basis for determining how to make students apply knowledge subsequent to the acquisition of knowledge. Instructional strategies for fostering student engagement in foreign language classrooms are regarded as critical and a variety of theories focus on student learning, needs and adult concerns that provide a basis for transfer of knowledge from teacher to learner. In this study, a recent model which is composed of the dimensions of knowledge, teaching approach and knowledge authority is presented to design virtual learning environments in foreign language teaching. The study was carried out in Selcuk University, School of Foreign Languages in Konya. The results of the study show that dynamic virtual environments are quite significant in foreign language education.

Key Words: Virtual environments, Knowledge transfer, Foreign language learning



The Human Model of Education or the Education Model of a Human

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This thesis is dedicated to creation of the education model of human beings. The objective of education reforms in both Azerbaijan and the world in general is to create a new secular education model. The contours of this model are included in curriculums in Azerbaijan. Despite a variety of novelties, the new education model does not explore the thinking levels, memories and visions of individuals or human beings, and does pay an inconsiderable attention to these features of the human beings. An intellectual model of human beings should be created first of all, in order to establish the human model of education. The intellectual model of human beings was grounded by Switzerland Psychologist J. Piaget in the 20th century. According to this theory, after forming the development model of cognitive structures of an individual, the education model and the knowledge structures existing there should be formed isomorphically to it. This model representing the thinking mode of the individual alters the teaching approach (upgrading from a part to the total) and replaces it with a constructive approach. This creative and constructive approach in its turn will alter the traditional philosophy of education, that is, the Western Philosophy (upgrading from a part to the total) and this alteration will comprise of the synthesis of the Western and the Eastern Education Philosophies (by upgrading from the total to a part). The created education model of a human being and his/her synthesized education philosophy will enable mobility of education and it to keep pace with time continuously, as well as development of each student there at his/her own internal capacity.

Keywords: human beings; education model;. Western and the Eastern Education Philosophies; isomorphically; constructive approach; thinking mode



Digital Exclusion: A study of Distance Learners in Nigerian Prisons

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Open Distance Learning remains the major access prison inmates have to higher education in Nigerian prisons, as their movement is restricted and subsequently the important role technology plays in Distance Learning. However, the uniqueness of the prison system is characterised by the emphasis on security which prohibits prison inmates from having access to internet facilities, among other challenges which prevents them from learning effectively. This study is therefore designed to explore distance learners accessibility to distance learning in some selected prisons in Nigeria. Lack of access to internet facilities in prison create problems such as distance learners in the prisons having to rely on third parties to assist in getting relevant resources such as study materials and assignments. This negates the objective of Open Distance learning which seeks to remove all barriers between learners and learning. If this challenge is not addressed it could lead to extinction of distance learning in Nigerian prisons, which in the long run could be one of the reasons that could lead to an increase in the rate of re-offending. Education has been reported to assist in breaking the cycle of reoffending as it gives prisoners an opportunity to acquire skills and qualifications that enable them to secure employment upon release. The only institution that provides prison inmate in Nigeria the opportunity to acquire higher education is the National Open University of Nigeria(NOUN). The study will employ the qualitative approach of inquiry using in-depth interviews of prison inmates who are learners of NOUN. Participant observation and informal conversation with prison and NOUN officials will also be used to obtain additional data. The participants for the study will be purposively selected based on certain criteria from prison inmates who are registered learners in NOUN. The criteria for selecting participants will include being a registered learner with NOUN, must have been a learner with the university for at least an academic session, and must be offering courses that have a minimum duration period of four years, knowledge of the use of internet facility and willingness to participate in the study. An ethical clearance was given by the ethics committee of the College of Education, UNISA. Approval to conduct the study has been obtained from the Controller of Prisons, Nigeria Prison Service, Lagos State Command. The participants signed the consent forms indicating their willingness to participate in the study voluntarily. The confidentiality and anonymity of participants will be ensured by not disclosing the names of participants and the prison. A focus group interview schedule will be designed to guide the in-depth interview. Content analysis will be employed for the interview transcripts and documents in an attempt to identify categories and themes. Based on the findings of the study, This study will design a guideline for administrators of the National Open University of Nigeria (NOUN) (the only Open Distance Learning University in Nigeria that give access to prison inmates in to higher education in Nigeria) and the Nigeria Prison Service on how to resolve the various challenges brought about by digital exclusion of distant learners in Nigerian.

Keywords: prison inmates, open distance learning, internet, access



Evaluating the Role of Organizational Commitment and Occupational Stressors İn Education Settings; a Theoretical Approach

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This study examines different theories which also involve the evaluation of work stress life in teaching. Perceived powerlessness and job insecurity in the workplace is detrimental to teachers' well-being as it results in reduced psychological well-being. Feelings of empowerment result in teachers having more positive attitudes in terms of their satisfaction at work as well as their commitment. Stress is multi-dimensional process that occurs in response to events or situations in our environment, to which called stressor. Therefore, a stressor stimulus is considered when an individual cannot face a particular situation. Some people try first to understand the people with whom they work their values, goals, experiences and beliefs. They internalize their knowledge for the individual with the best of what is known as selective motivation (eliciting). Culture, ethnicity, experience, context and other aspects of the identity of teachers merge (join) to develop his answers against any interaction or event. Teachers' carrying capacity (resources) various different and challenging experience. All these factors affect the substantial variation in personal motivation. A veteran teacher p.sh would react differently to task for using a new curriculum in comparison with a new teacher (beginner) who have yet to form a strong professional identity. This requires consideration of certain conditions, which are related to the size of the entity that will be examined, as well as potential resources available to this end.

Five main sources of work stress are the working conditions (poor condition to work, work overload, the pressure of time and responsibilities for things or others), role in the organization (uncertainty role and role conflict), career development, relationships at work, the organizational structure and climate. Occupational stress is thought to produce two kinds of outcomes: 1) mental and physical ill-health in the employees, and 2) initiates coping efforts which are intended to manage, minimize or prevent the negative impact of stress (Edwards, 1992). Work requirements are not decisive for the emergence of stress. The problem lies in the discrepancy between these requirements and subjective evaluation of personal resources. Here is a cognitive dissonance. Research has shown that many individuals consider stress at work as a personal failure and weakness. This is why it causes a denial based on feelings of guilt and is followed by the fact that people experiencing difficulty to accept the existence of these problems. Stress professional is not a problem of individuals challenging to build, but a problem of situations difficulties abound (outstanding) in the relationship itself, as well as the structure of interpersonal relationships, a determination unclear positions and social roles, lack of emotional support from and peer leadership.

Basically, stress management consists of eliminating, minimizing or preventing the factors that cause it. Given that this is not a simple process, but complex, stress management requires steps with technical, organizational and social stipulated in the action plans of each entity.

Keywords: education setting, teacher, organizational commitment, occupational strains.



Primary School Teachers' Perceptions of School Report

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School report is a document prepared by a teacher to follow up and evaluate a student's progress in lessons throughout a certain educational period. It is also an academic tool that allows the student and parents to be informed about the progress during that time and to see the shortcomings and to take the necessary precautions. The main objective of school report is not to show students' scores or to determine whether they have passed a lesson, but rather, to give information about their current state, to manage their skills by taking their differences into account, to guide them according to their interests, needs and skills, to determine the difficulties and deficiencies they come up against throughout the learning process and to help do away with them. However, if a school report is only considered in terms of scores and so becomes an indicator of students' success or failure, taking the report as a reference, the students whose report shows them successful might consider themselves more accepted, more important and valuable. Those with lower academic success, on the other hand, are naturally driven into a defensive psychology, which causes serious problems because the report has become the main target and is only assessed in terms of scores. The fault of parents and teachers to regard school report as an aim to achieve affects students negatively in many ways and might cause psychological problems in them in the short term. Perspectives arising from wrong responses, worries and fears, comparisons, high expectations, attributing failure to personality, critics without thinking, weathering and unnecessary rewards or punishments once again reveal the importance of school report worry. The research aims to reveal how primary school teachers, the first step of teaching, perceive school report. Teacher's perception of school report is the variable playing a fundamental role in shaping both student's and parents' definition of and expectations from school report. The research encompasses 190 primary school teachers in the city of Kütahya. According to the research results, 62,6% of the teachers think that school report shows the lessons the students are good at and 61,6% think that school report shows the lessons the students are deficient in and their academic progress while 59.5% consider it only as a tool. The teachers don't consider school report as a means of punishment and as the determiner of personality, and they think that it shouldn't be a source of honor or shame. The findings show that primary school teachers' perceptions of school report are mostly positive in favor of students. In this respect, it can be said that they perceive school report relevantly to its purpose. Regardless of the age group of the students, not turning the repot period into a trauma is based upon not only teachers' but also parents and students' perception of school report. Primary school teachers should reflect their perceptions of school report to students and parents and should also tell them that school reports are only a route map involving certain indicators in the early period and that all students are precious regardless of their reports. As regards to the school aspect, counsellors



should explain the purpose of school report to teachers, parents and students and should provide the required guidance and warnings. When media is considered, the traditional school report understanding should be evaded and by sensitively planning the stress factors of school report like report festivals, awards and ads, it should be reiterated that school report is a documentation of students' mean scores.

With the cooperation between the Directorates of National Education and Education Faculties, preservice teachers should be provided such training during theoretical and practical applications of assessment and evaluation lessons that shows school report as a tool depending on a process, uses scientific assessment and evaluation arguments, and gives priority to student psychology and health. Perceptions of students and parents about school report should be researched.

School reports that don't only provide quantitative information but also give student success and success areas prominence should be designed; that is, as well as academic scores, school reports should also involve student success, areas requiring progress, parents' roles in teaching process, what students will/should do at school, statistical graphs showing previous success levels, in-class success, expected success levels, thoughts of the teacher, student and parents, study habits, target and suggestions.

Key words: primary school teachers, school report, perception of school report, assessment and evaluation



The Effects of Simulations and Animations Applied in the Computer Course on Student's Motivation

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The purpose of this study is to investigate the effects of simulations and the animations applied in the computer course on students motivation. "Instructional Materials Motivation Survey [IMMS]" – "Öğretim Materyalleri Motivasyon Anketi "[ÖMMA] developed by JM Keller has been applied on both beginning and ending of course and by the way the effects of activities carried out on the motivation has been examined. Survey consists of 24 items in a structure including four factors (attention, relevance, confidence, satisfaction) in it. Survey has been applied to 30 students studying in Amasya University , Amasya Faculty of Education, Classroom Teaching Department; 32 students of Mathematics Teaching Department; 26 students studying in Theological Science and results have been analyzed by SPSS 18 software package. According to the findings, it has been observed that using simulations and animations in computer course of Classroom Teaching Section, Theological Mathematics Section and Theological Science has a positive effect on the motivation of students and has a significant differentiation according to the situation that simulations and animations have not been applied (sig <0.05).

Keywords: Motivation, animastion, simulation, IMMS



Conceptual Tools for Depicting and Improving Pedagogical Picture before Technology Integration

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Shortly defined as producing valuable knowledge for a community by that community, knowledge building is a recent conceptualization of teaching based on students collaboratively producing knowledge as they work out explanations for real and authentic problems of understanding. Compared to other time honored and well used conceptualizations of teaching, namely Cultural Transmission (CT), Skill Training (ST), Fostering Natural Development (FND) and Conceptual Change (CC), Knowledge Building (KB) teaching clearly differentiates learning from deliberate knowledge building as it puts knowledge as its clear goal and product. Nearly ten conceptual tools are offered to depict and improve pedagogical character and technology integration in most educational situations.

Problem of integrating technology to teaching and learning is formulated as a function of epistemic goals and conceptualization of teaching. Teachers aiming at their students having learned a certain body of knowledge (CT), can best use technology to find out how much they already know or don't know and use information technologies such as internet, to expand and reverse the classical order of teaching actions (example: flipped classroom). If developing certain skills is the goal (ST) teacher can use technology and some design principles to have students practice target skills (example: goal based scenarios). Fostering students' natural abilities (FND) would take some exploring to find out those perceived potentials where some simulations, games and wide range of professional and recreational resources can offer significant help (example: user groups). Teachers looking to have students attain certain concepts (CC) wants to know whether or in what form students hold target concepts and search for expert conceptual structure to compare with. Concept mapping is one way of checking and comparing target concepts and some software offer valuable help in connecting the concepts (example: Inspiration TM).

More examples and analysis will be offered which will be expounded by CSCL research. Pedagogical depiction tools that will be talked about are: (1) the kind and quality of Dialogue among learners and their teacher, (2) Classroom Discourse Dynamics, (3) the treatment of Knowledge, (4) the Teacher Type (of teaching), (5) the status of student Understanding, (6) Amount of Instruction vs. Epistemic Agency, (7) Activity vs. Ideas in the classroom, (8) Individual vs. Community in the classroom, (9) Belief vs. Design Mode in the classroom, and (10) Folk Theory vs. Principled Design of the pedagogical efforts.

Most teachers develop a practical way of handling their teaching profession and find it difficult to derive practical help from academic work. Some common problem formulations are suggested that helps teachers and researchers talk about roughly the same phenomenon.

Keywords: technology integration, knowledge building, pedagogical analysis, conceptualization of teaching, CSCL



Technological Possibilities and Materials in Literature Teacing and Researches

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We live in an age in which using technologic equipments, notably computer and internet gain advantage to informed users. Those who take advantage of these possibilities adequately and effectively can get productive results. Those who do not can't receive a recompense for their work

In this context there are significant differences between elders and juveniles, students and teachers. Also there are significant differences between various branches. It can be seen obviously that generally in the field of physical sciences technological possibilities are took advantage more than in the field of social sciences. If we look from the viewpoint of social sciences, let alone technological possibilities are used adequately, they do not known enough.

Internet is mostly regarded as a time and energy consuming factor, and cause attention deficit. However, those who use it suitably have the upper hand. For instance, a literature researcher can reach up a manuscript in a library located abroad. Significant literature essays can often be reached in internet; furthermore, internet also has very important literary sources.

Possibilities in internet and internet usage are one of the aspects which are discussed in this proceeding. What a literature teacher can find in internet and how to analyse them. The positive and negative aspects of internet sources and the reliability of these sources will be emphasised. Because it cannot be said that internet sources are evaluated properly and adequately.

One of the important things for literature research and literature teaching is the usage of the technological material. Unfortunately technological materials are not known enough and used effectively. Nearly every literature teacher has desktop, laptop and tablet computers. But, unfortunately computers are used ineffectively. In fact many users do not know to use computers properly. For instance a literature teacher or researchers often use some word processing software such as Microsoft Word or Pages for Macintosh. Therefore these software should be known better. Unfortunately many researchers use such software as is they use a typewriter. For these reason in the proceeding computer Technologies will be discussed in a different part.

There are some other software to benefit for a literature researcher. Some of them are excel, power point, photoshop, picasso, corel draw, publisher, indisigne, book maker, moviemaker, video cutter, adobe reader, pdf writer. Sometimes a basic software can have significant possibilities. Therefore even a user do not use them professionally, he/she should know what they do.

Today there are a lot of technological equipments apart from computers. They even became common in our daily life such as mobile phones and televisions. Mobile phones and televisions are used for fun at present. But mobile phones and televisions can became very



effective in educational and academic researches. There will be some examples concerning this issue.

There is numerous literature software, Compact Discs of which most literature researcher and teacher even do not aware. Some of them are Bibliography of essays from Republic Period, Bibliography of Turkish Works written in Arabic script, Belleten, Libraries, Text bank. As a part of Fatih Project there are smart boards in classes around the Turkey, but teachers do not use them effectively as required.

In this study technological possibilities which can be used in literature teaching will be exemplified. Besides, usage of these Technologies and misinformation concerning these Technologies will be discussed.

Key words: Literature researches, literature teaching, information technologies, technological possibilities, different approaches and viewpoints.



A New Approach in Foreign Language Learning on Inernet: Duolingo

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Education is one of the fields which fast-growing computer and internet Technologies deeply influenced and shaped. Foreign language teaching is also influenced by these Technologies and took a new shape. In the beginning foreign language teaching is assisted by some software. But today foreign language teaching has shifted to internet sites and various virtual platforms in which millions of people come together have emerged. These platforms allow people who came together for the some reason to create virtual classes and work rooms. By this way language teaching is based on different ground. Every user became both student and teacher. One of these platforms is Duolingo. Duolingo which provides a lot of foreign language learning to users gained a different point of view to foreign language education.

Dualingo is a product of an effort to translate internet to different languages. While users who translating the simple texts to their languages, they also help a huge translation effort. When these simple translations, which are done by users, come together a significant translation operation arises. Duolingo is a website which enables users to study on four basic language skills and grammar. A combination of games and lessons makes learning enjoyable. It can be said that students can follow their learning progress and this whet their competitive feelings and motivate them. Also to be a part of a greater team work whets their interest to study.

Dualingo offers users various clues and detailed information on the learned topic. Users also can communicate each other, they can ask questions to each other and carry out various debates. It is important that a user can ask questions about the language which is he/she learning to users who talk it natively.

Turkish is one of the languages which can be learned alongside of English, French, German, Italian and Arabic. Therefore Duolingo can become an important platform for teaching Turkish as a foreign language. The lessons which are learned in classroom can support by duolingo out of the class. Dualingo records the learning history and progress and this enable teachers to follow their students' current status.

In this study the website called Duolingo will be presented and its' possible usages in teaching Turkish as a Foreign language will be discussed.

Keywords: Foreign language teaching on internet, Duolingo, teaching Turkish as a foreign language.



IT Teachers' Self-Efficacy Beliefs towards Computer Programming

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The purpose of this study was to analyse the to Information Technologies (IT) teachers' self-efficacy belief by updating their information related to programming education and demonstrate up-to-date tools to teach programming for students attending "Information Technologies and Software" course especially in the second stage of primary education. The study sample consisted of 30 IT teachers (5 teachers for pilot studies) who attended the scientific meeting that is a kind of seminar for IT teachers about alternative methods and tools in computer programming education which is supported by TUBITAK's Supporting Science Education Activity Program between 7 and 12 September 2015. Researchers collected quantitative data through a questionnaire (Computer Programming Self-Efficacy Scale) which consisting of 9 seven-point Likert-type questions and focus group interviews were conducted to learn IT teachers' views in a detailed way. The results indicated that visual programming tools may have an impact significantly on IT teachers' self-efficacy towards programming.

Keywords: Computer programming education seminar, programming, self-efficacy



Views of Special Education Teachers about the Effectiveness of Professional Studies

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Schools are institutions in which individuals, who pursue their education, acquire various knowledge, skills and behaviors depending on their characteristics and needs. In order to achieve these extensive tasks all the elements needs to work together. Among these elements there are school principals, teachers, syllabus, and equipment. Teachers are responsible for planning, implementing, and evaluating the work and process regarding the education and teaching both in school and classrooms. Effectiveness of school in education and teaching is mostly related to teachers. Teachers' working concertedly will increase their effectiveness. The 38th article of preschool, primary school and elementary school regulations related to this area states 'in order to increase their knowledge and experience about general knowledge, special area education and pedagogical formation, to have them acquire new skills, to find solutions to problems which they encounter in education and teaching, to prepare and apply plans and programs according to needs of students and environment, teachers and principals who work in preschools and primary schools participate in professional studies from the end of the teaching term to first day of the July and from the first day of the September to beginning of the teaching term and in the predetermined periods during the education year.' The professional studies which teachers have, are important in terms of sharing their experiences as well as following the innovations and carrying them into practice. Especially, teachers who work in special education area, need to prepare and apply individualized education programs appropriate for needs and characteristics of their students. Teachers who work in special education area, need to determine their students' performances at the beginning of the education year and prepare education programs appropriate for these performances. Preparation of education programs requires a practical, comprehensive and long process. In this sense performances of each student who has special education services needs to be measured one by one. In the stage of measuring performances, choosing, preparing and using proper measurement tools is important in terms of obtaining desired information. Because proper goals and teaching processes for student performance should be formed. Furthermore, acting in harmony and sharing information about undesirable behaviors observed in students who have special education, and regulating these behaviors will contribute to the program which will be prepared. Although there are studies about the professional studies of teachers, it was determined that there are not enough studies about the professional studies of special education teachers who work in the area of education of mentally retarded students. This study aims to determine the views of special education teachers, who work in the area of education of mentally retarded students, about effectiveness of professional studies



Data were collected with semi structured interview form. The questions in the interview form were developed by the researchers and reviewed by an academician who is working in the area of assessment and evaluation and experts who work in the area. Later a pilot study was done by implementing the interview form on three teachers and the interview form implemented after having been given the final form. Research was carried out in five schools which offer education to individuals with mental disabilities in Konya city center in 2014-2015 education year. 24 educators, 7 of which are principals and 17 of which are teachers, participated in the study. Among these educators there are teachers graduated from different departments and special education department. The data obtained were analyzed descriptively and findings were given in percentages and frequencies.

When the data obtained from the research were examined, it was found out that the professional studies (seminars) are generally done face to face in September before the school starts and in June after the teaching term finishes. Besides, it was determined that presentations are usually done by teachers and school principals; that the topics which will be discussed are determined by Ministry of Education, school principals and teachers; and that the topics about student programs, materials, legislation practices, preparation of classrooms, teaching methods and special education are also discussed. It was found out that the professional studies generally contribute to teachers, principals and students.

Keywords: Special education, individual in need of special education, professional study.



An Investigation of Computer Based Mathematics Instruction in Early Childhood Education: A Literature Review of The Recent Empirical Studies

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The purpose of this paper is to examine and discuss the most recent publications related to the computer based mathematics instruction in terms of their use and effectiveness for early childhood children. For this purpose, the paper starts with three main research questions such as "what are the results of the recent empirical studies conducted for the use and effectiveness of the computer based mathematics instruction for early childhood children", "what are the most covered mathematical concepts in these empirical studies", and "what can be recommended for the future studies". In order to reach the answer of these questions, the search was limited by the years from 2005 through 2015 and the paper focused on only empirical studies by using EBSCOhost Databases (e.g. ERIC, Education Research Complete, ULAKBIM Turkish National Databases, and etc.), ProQuest Dissertations & Theses Global and YÖK-Thesis Center. Moreover, in order to cover the scope of this paper, the most relevant 11 empirical studies were included in the paper by using different combinations of the key terms such as computer based instruction, computer based education, mathematics, early mathematics, early childhood children or preschool children.

In brief then, this paper will begin with a brief overview of computer use and mathematics in early childhood education, then, continue with the empirical studies to figure out the use and the effectiveness of computer based mathematics instruction for early childhood children. Moreover, at the end, a conclusion will be given in order to discuss the reviewed empirical studies.

Keyword: Computer based education, early childhood children, mathematics instruction



Research of Distance Education Students Cloud Perceptions and Use Cases

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Emre DEMİR

Atilla ARGÜZEN

There are total of 193 universities, including government and private, in Turkish higher education system. According to the Higher Education Council 2014-15 the academic year statistics, there are 2.013.672 short cycle(associate degree) and 3.628.800 first cycle (bachelor degree) students. Along with second cycle(master degree) and third cycle(doctorate degree) about six million students pursue their higher education diploma. This situation increases the demand on the information technologies. Nowadays, expanding areas of cloud computing such as storage, software, database, and hardware sharing are at the forefront. In addition, the cloud computing technology provide great contributions to educational activities. In the education process conducted in our country, a few researches have been made to measure the awareness of cloud computing technology.

In this study, the distance education students of cloud computing and usage levels were investigated. In the first stage, by considering experts opinions a survey on cloud perception and usage levels was implemented. In the second stage the survey was conducted the distance education students that forms the research sample. The sample consists of 1000 students at Hitit University. In the final stage, the resulting survey data was processed by SPSS program and analyzed. The outcome presented in the conclusion section.

Keyword: E-learning, distance education, cloud computing



Teaching Through the Development Of Critical Thinking in Primary School (Grade Iv).

Fatmir Vadohej

Mehdi Kroni

Critical thinking should lead the whole process of learning from understanding what is observed up to the granting of an argument which must determine whether the conclusion provided is true or appropriate, it may be recognized as such or not. For all who think in a critical way, the bases of understanding information is the starting point more than reaching point, the end of learning. The development of critical thinking involves the absorption of ideas and the review of their impact, presented in a sophisticated manner with careful balancing with opposing ideas. It includes the construction of reliable systems to try them out and take a certain position on the basis of these structures. Critical thinking is a complex process involving ideas and creative resources, the re-conceptualization and restructuring concepts and information. It is a cognitive process, active and interactive, which occurs simultaneously in many levels of thinking and is inclined towards the goal, but can also be a creative process. Young children are fully capable to engage in appropriate levels of development of critical thinking. They are willing to get involved on solving complex problems and display higher levels of thinking on issues related to decision-taking. Teachers have discussed about improving the learning of factual knowledge to practical learning and conceptual knowledge. Those who suggest that factual knowledge typically are more important, believe that there are a certain number of facts, which, when used appropriately, prepare students to become fully productive participants socially. A piece of writing deals on importance of the development of critical and creative thinking in young school ages. Simultaneously with the development of critical and creative thinking is seen and systematic thinking. The study concentrates on the role, importance and value of learning by problematic thinking, as well as elements that should be taken into account during the resolution of the problem to be successful in resolving it. A good part of the paper deals with practical realization of teaching, about thinking how students operate, how easier, faster and more accurate understand learning. The ability of teachers lies precisely in the diversity of the use of different techniques which promote and develop the relative levels of thinking of children. Teacher with the use of teaching techniques should "move" thinking of students along this directions from the bottom to top and from top - down, to "see" the theme of teaching in all its dimensions. Possession of knowledge and skills of critical thinking in teaching, seen as an intentional and reflexive trial of what students believe or do in response to the observations, experiences, oral or written statements and different arguments they face on a matter or field of education, constitutes another aspect of the paper. The important thing in the paper is the identification of a joint effort to bring real improvements on student learning, a sustainable learning which should last for a lifetime. Part of this work is also giving some recommendations of how to develop critical and creative thinking in primary education.

Keyword: critical thinking, creative learning, integration of ideas and teaching units.



File Students' Assessment as a Self-Assessment Tool in Primary

Education (Classes' 1st-3rd)

Eranda Bilali (Halluni)

An important aspect of teaching is the evaluation. Evaluation is the process of gathering information from multiple and diverse sources and examining of the latter in order to understand better what students know and what they can do with the knowledge they have gained from their learning experience, a process that culminates when the assessment results are used to improve learning in the future. In the learning environment, the notion of evaluation carries a vision of tests, exams and an endless list of grades. Grading is also perceived as an instrument, which assesses learning and personality of students. Assessment and evaluation without alternated with other forms has increased the possibility of reducing the potential for learning and creativity. Nowadays the interest of students, teachers and parents is oriented towards finding new alternatives of assessments. Alternative assessment refers to procedures that can be used within the context of teaching and that can easily be part of the activities of the class or the school. Alternative methods such as diaries, student portfolios, exhibitions, conferences, etc., have yielded positive results in the acquisition of knowledge by students and enhance school performance. This for the simple reason that these types of assessments differ from traditional assessment, and many of them motivate learners and the progress in their learning. The new ways of learning dictate the need of the evaluation through the use of various instruments and procedures of the data collection, interpretation and analysis in favor of improving teaching and learning. In terms of a competency-based teaching, which is applied to the Albanian education system, requires assessment of competencies achieved by pupils. This is a difficult process because each student has to assess the knowledge, skills, values and attitudes, which often is difficult to find the appropriate type of test, tasks or work through which students demonstrate on the level of acquisition. Evaluation by files (portfolio) is a new trend in Albanian learning environment. An important aspect of the paper is to assess the competence on the basis of levels of achievement describing the criteria and how to build students dossier evaluation and self-assessment instrument. The use in practice of the evaluation folder/portfolio enables the increase of learning capacity, reduce the tension in the process of learning, increase interactivity and consequently the creation of creative capacity and personality development of students. The important thing in the paper are conclusions drawn that the file/portfolio of students provides information for teachers, students and parents, enabling them with the understanding of achievement, but also the understanding that what the children need most aiming at improving the learning practices.

Keyword: assessment scale, student progress, achievement level of competence, assessment instrument, file/portfolio of student.



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As an educators, we all enjoy making formulas with letters and using steps to explain how an effective lessons organized with learning models and strategies such as 5E (Enter/engage, Exploration, Explanation, Elaboration, and Evaluation) or REACT (Relating, Experiencing, Applying, Cooperating, and Transferring) These two are tested in this study in terms of students', teachers' and academicians' perspectives. First of all, we prepared a lesson plan appropriate for the 5E and REACT and then we asked two experts to validate lesson plans. After experts confirmations, parts of the lesson plan about flying are mixed and presented to students, teachers and academicians via internet. We received participants from our social media accounts and sent the link of web page of the study in different social media groups. All our participants ordered the lesson plan by giving numbers from one to ten; five parts (or steps) for 5E and other five parts for REACT In this study, we examined for answers to the following four questions:

- 1) How many participants do correctly order parts of the lesson plan appropriate for 5E or REACT
- 2) Are there any new or meaningful formulas/steps to be used?
- 3) Which of the two (5E or REACT) is consistent with inner and participants' order?
- 4) First two questions are re-asked and answered in terms of types of participants.

These questions are answered with descriptive statistics from collected data. With this study we aimed to explain how correct or applicable usage of the 5E and REACT- are and thereby this study includes some critics and comparisons about The 5E model and the REACT strategy.

Keywords: 5E, REACT, Flying Context



Participatory Educational Researches

Tahirli Aytan (Lyceum named after Ac. Zarifa Aliyeva)

'Purely and simply teachers would recover the nation'
M.K.Ataturk

This thesis discusses the ways of performance of educational reforms in Azerbaijan and of integration of Azerbaijan's education system into the global education system. Since a teacher is one of the key faces of any education system, outputs of all reforms conducted in the education system directly relate to him/her. In order to increase the quality of education and foster a young generation with advanced intellectual abilities and an independent thought as well as a creative working capacity, who would ensure future development and progress of our country, every teacher should firstly change his/her traditional thinking of teaching and should learn new methods and technologies to achieve these under this reform.

The profession of teaching is also one that is able to make changes and manage. Handling with the development process of an individual requires being a qualified one. By reflecting the science-based content of professional knowledge, skills and practices, it comprises the normative pattern of the experience of a teacher. Recent changes in the modern education system make it inevitable to increase the experience and professionalism of the teacher, i.e. his/her professional qualifications. The key purposes of the modern education are to meet factual and prospective needs of individuals, societies and governments; and foster a fully developed citizen for the country, with ability to adapt to the society, start a labor activity, and educate and advance him/her.

And a pedagogue with ability to think independently and forecast the outputs of his/her activity as well as model the teaching process is a guarantor of achieving established goals. That is the reason why the need for individual teachers who are experienced, creatively thinking, competitive and modern, with ability to foster individuals in today's dynamically changing world has increased extremely.

By approaching from the perspective of recent requirements, it is possible to determine key development methods of a teacher's professional qualifications:

- 1. Work in methodical unions and creative teams;
- 2. Research activities;
- 3. Innovations and possessing new pedagogical technologies;
- 4. Various types of pedagogical support;
- 5. An active participation in pedagogical competitions and festivals;
- 6. Translation of own pedagogical experience; and
- 7. Use of ICTs, and etc.

None of the listed methods may give any output, unless a pedagogue understands his/her need for increase of his/her professional qualifications in private, which entails the need for creation of a satisfactory condition for instigation (motivation) and pedagogical progress.

Such a condition should be created where a pedagogue should independently understand his/her need for advancement of his/her professional qualifications. Analyzing his/her pedagogical experience activates the professional self-development of a teacher, as a result of



which his/her research skills enhances, which in its turn get integrated to the pedagogical activity. The pedagogue should be involved in management of school development, which helps to advancement of his/her professionalism.

Advancement of the professional qualifications is a dynamic process that leads to development of individual professional qualifications and aggregation of professional experience requiring sustainable development and self-improvement, which is possession and modernization of the professional experience.

We can choose the following stages of formation of a professional qualification:

- · Self-analysis and understating needs;
- Planning self-development (goals, tasks and solutions); and
- Self-discovery, review and self-correction.

Formation of a professional qualification is a periodic process, since there is a sustainable need to enhance professionalism in the process of pedagogical activity and the listed stages repeat each time, although under a new quality. In general, the self-development process is governed biologically and relates to socialization and individualization of a person who consciously arranges his/her life and hence, his/her development. The process of development of the professional qualification also highly depends on the relevant environment. Therefore, exclusively the environment should encourage the professional self-development. There is a need to establish a democratic management system in schools, which is also a system of encouragement of personnel, and various types of the pedagogical control (not management!) such as surveying, conducting tests and interviews, competitions, intra-school activities on experience exchange, and contests and presentation of individual achievements. The mentioned types of incentives enable to reduce emotional concerns of a pedagogue and influences on formation of an acceptable psychological environment in a team of teachers.

Keywords: modern education system, teacher's professional qualifications, pedagogue, research, school, quality education



Examination the Secondary School Students' Levels of Computer Games Addiction In Terms Of Different Variables

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According to educators and pedagogs, today, children significantly benefit from playing games. A game consists of actions that are only for fun, but not for a certain consequence (Yavuzer, 2010). A child or a primary school student benefits much from games socially, culturally, psychologically, mentally and physically (Sahin and Tuğrul, 2012). Through playing games, children improve their muscles and bones physically; they contribute to their language development; they benefit psychologically by defending their rights among friends; they contribute to the characteristics of their society by their speeches and actions during games, and they benefit mentally by producing solutions during games. Benefits of playing games for children have been emphasized by pedagogs and professional educators in the 21st century. Improvements in technology have transferred the games to the computer environment. Computer games are highly effective tools in children's acquiring computer literacy. In addition to their help for information and communication technology literacy, games are also helpful for acquiring hand-eye coordination, improving the kinetical skills, learning imagining, explaining the cause and effect relation, visualising objects from abstract to concrete, etc (Cesarone, 1994). Students benefit much from playing games educationally, socially, culturally, psychologically, mentally and physically. This study aims to identify the secondary school students' levels of computer games addiction. On the other hand, it has been found out that computer games have negative effects on children and adolescents. It has been concluded that computer games addiction may lead an individual to more aggressive behaviour and violence (Trudewind and Steckel, 2003; Hartmann, 2007), and anxiety (Schulte-Markwort, 2005); it may have socially negative effects because people usually play computer games alone at home, and it may have negative effects on the blood circulation and the musculoskeletal system as people are inactive while playing computer games. This study aims to analyse the 5th, 6th, 7th and 8th graders' levels of computer games addiction in terms of different variables. The present study, using "the screening model" as the research method, was conducted with the participation of 240 5th, 6th, 7th and 8th graders who study at a public secondary school. As data collection tools, a personal data form which was developed by researchers and by which the demographic characteristics of the study group students were obtained, and a 21 item 5 Likert type scale, the "Games Addiction Scale for Children" which was developed by Horzum, Ayas and Balta were used (2008). The Cronbach α reliability coefficient of the scale was .85, and the KMO value was .90. The scale consisted of 4 factors. These were determined as "Not being able to stop playing computer games, and being disturbed when interrupted", "Imagining the computer games, and associating them to the real life", "Delaying duties because of playing computer games", and "Preferring playing computer games to other activities". Descriptive statistics were used in analysing data, and ttest and single factor variance analysis were used for unrelated samples. This study has

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investigated how the different variables such as gender, class, educational level of parents, weekly duration of playing games, having a computer or not, having Internet access or not and socio-economic level affect the secondary school students' levels of computer games addiction; and it concluded that secondary school male students' levels of computer games addiction were significantly higher when secondary school students' levels of computer games addiction was compared in terms of the variable of gender. It has been concluded that the levels of games addiction differ significantly in terms of educational level of parents, and the more the educational level of parents increase the more their children's games addiction levels decrease. Thus, the present study revealed that the childrens' computer games addiction is an important variable which may affect their daily life and educational life. It is considered significant that parents help in a controlled manner their children have an appropriate habit of playing games because the playing age childrens' habits of playing computer games may affect their future life.

Keywords: computer addiction; computer game addiction; game addiction; secondary school students; addiction.



The Relation Between Life Long Learning Tendency And Leadership Level Of Education Managers

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In order to provide students with a good quality education, it is necessary to provide good quality schools. Administrators and teachers are the ones who increase the quality of education and schools. Administrators' desire for improving themselves naturally affects teachers. By this way, teachers also improve themselves and turn out to be good models for students. Lifelong learning skill that should be taught to students as one of the basic skills is transferred from administrators to teachers, and from teachers to students. Therefore, being aware of administrators' tendency to lifelong learning gains importance. Since increasing productivity has become important recently, the importance of leadership has increased as well. Effective school administrators are important factors in achieving the goals of educational institutions. School administrators' feeling the need of learning will be the first step in both improving themselves and their schools. The aim of this study is to determine the relation between the level of leadership and the tendency to lifelong learning.

This study aims to reveal the characteristics of educational leaders and their tendency to learn, and the relation between them. For this reason, the research design used here is the relational screening model that shows the present situation. "Relational screening models are research models that aim to determine the existence and/or the degree of covariance between two or more variables" (Karasar, 2012, s.81). 135 educational administrators who work in Muş, Bulanık in 2014-2015 school year participated in this study. "Easily Accessible Situation Sampling" was used as a method because this sampling helps the researcher be faster and practical.

In this study, 27-item "Lifelong Learning Tendency Scale" that was developed by Diker Coşkun (2009) and that have .890 internal coefficient of consistence was used. The sub-dimensions of the scale are constancy, motivation, deprivation of arranging learning, and deprivation of interest.

44-item and 4 point likert type leadership questionnaire developed by Bayrak (2001) was used. The sub-dimensions of the scale are educational leadership, ethical leadership, visionary leadership, learning leadership, and transformational leadership.

Examining the average points of the lifelong learning tendency scale, it was observed that lifelong learning tendency of educational administrators is not very high. Similarly, Coşkun



(2009), in her study conducted with university students, found out that lifelong learning tendency of the university students is low. However, Gencel (2013) revealed a reverse situation in her study conducted to determine the lifelong learning tendency of candidate teachers. In that study, it was found out that candidate teachers feel competent enough in terms of lifelong learning. People having the competency of leadership can motivate others so as to achieve certain goals. The role of leaders is very important in encouraging people in lifelong learning. Considering the research results, it can be stated that leadership level of educational leaders is not high. Research results also revealed that gender differences did not affect the leadership levels. Another result was that lifelong learning tendency is higher in the group of participants who had 11-15 year experience in leadership, which can show that the need for learning arises from a certain age and experience. Examining the sub-dimensions of leadership, educational leaders showed the characteristics of a transformational leader most. In addition, when the relationship between the leadership levels and lifelong learning tendency was analyzed, no meaningful relation was found. It is thought that having a vision and being transformational and educational is always related to being up-to-date. Lifelong learning is necessary for being up-to-date.

Keywords: Life long learning tendency, leadership level, education manager



Preliminary Analysis of Virtual and Augmented Reality in FLT Classrooms

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Deniz Demirkan

In the field of didactic, the various approaches are correlated with the integration of new technology. In foreign language teaching for example, the audio-visual-global structural (AVGS) method used in the 1960's made use of the simultaneous use of video and sound to teach learners to learn to speak and communicate in situations of daily life. Nowadays, the action oriented approach, defined by the CEFR suggests that learners perform tasks which require the use of strategies in order to understand and/or produce spoken or written texts. This research aims to analyze the potential uses of augmented reality and virtual reality technology during foreign language teaching. The augmented reality is a live direct or indirect view of a physical, real-world environment where the elements are augmented or supplemented by computer-generated sensory input such as sound, video or graphics. The virtual reality can be referred to as immersive multimedia or computer-simulated life, replicates an environment that simulates physical presence in places in the real world or imagined worlds. Virtual reality can recreate sensory experiences, which include virtual taste, sight, smell, sound, and touch.

Firstly, the technical possibilities of these new teaching materials have been analyzed. This will lead to the association and definition of this technology to the concept of micro-world in didactic which appears to be theoretically well adapted to the task-oriented approach especially for foreign language students who did not grow up in the target language country. Then using concepts of instrumental genesis experimentations have been carried out. They have been led during lessons entitled "integrating new ICT in foreign language teaching". Those lessons are provided to Turkish learners in the department of French as a foreign language. In a first part, technical characteristic and function have been taught to these future FLT teachers. A-didactical sequences will be constructed and analyzed by FLT student's in ICT lesson. A statistical analysis and Semi structured interviews have been carried out in order to analyze the perception of this technology of these future teachers. The various domains of possible application has been highlighted. They can be used in a cultural purpose (3D cultural visit of famous French places like museums, streets, monuments), or task realization that support didactical sequences such as cooking or presenting the weather. It is shown that games combined with this technology outside the classroom is well perceived by the future FFLT teachers.

This analysis shows that the activity elaborated by students who prefer new didactical current (constructivism, task based approach) is more adapted than those who are created by students preferring traditional didactic (grammar-translation/ direct method). Finally this research



proves the importance of study of both the instrumentalisation process performed by the teacher and by the students in a new ICT in a didactic situation.

 $\textbf{Keywords:} \ \, \text{Augmented reality - Virtual reality - Foreign Language Teaching - Task-based approach} \\$



The Systems-Based Mentoring Model within the Process of Technology Integration

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Numerous attempts were provided in the researches of educational technologies in order to perform the technology integration. Numerous models and approaches related to the integration process are introduced. In those models, generally the teachers are located at the center of the process and they have provided the necessary support by guidingduring this process. However, there is no enough explanation about the source and quantity of this support. Thus, it is important to choose a technology integration model in order to prepare the teachers for the technology integration, enable them to use the current and new technologies, strengthen their belief related to new teaching technologies, and eliminate the obstacles they may encounter during this process. Accordingly, Systems-Based Mentoring Model comes into prominence at the point of resolving the problems that the teachers encounter and the chaos of resources which continuously intervene to the educational environments.

In the model, technology leadership is adapted as the basic approach to the professional development of the teachers. It is stated that technology leader could play a supportive role against various obstacles which the teachers are willing to integrate the technology (time, attitudes, access, culture, vocational development etc.) and various strategies are presented in order to create a vision for technology integration, modeling the use of technology and training leader teachers. In the model, the teachers pass throughout various stages and they are encouraged to utilize the technology. The final objective of the model is to perform the technology integration through evaluating the current resources in schools and establish an integration culture within the system which is supported by the teachers and the school administrators and aimed to provide maintaining.

Need Analysis: The model begins with performing a need analysis throughout the system. By this means, a vision of established for the technology integration and short term and long term targets are determined in accordance with this vision.

Visions and Goals: The short-term and long-term targets which are established at this stage of the model will inform the teachers what to do and how to do. While establishing those visions and targets, it will be useful that teachers and administrators participate and support the technology integration.

Technology Integration: According to the model, technology integration consists of four basic stages. The main objective at the initial stage is to team up with the teachers and minimize



the obstacles they encounter. During the phase of preparing the teachers, the deficiencies of the teachers related to using technology are focused on and it is aimed to prepare them for the use of technology. The basic objective of the phase of focusing on education program is to increase the experiences of the teachers through pedagogical knowledge required for the integration of the technology. In the phase of application community, a school culture which the teachers and administrators at school could cooperate about technology integration and sort out the obstacles that may be encountered while using the technology is aimed to establish. Evaluate and Revise: After the completion of the each stage of the technology integration, it is necessary to evaluate the achievement in reaching the visions and targets determined at the beginning of the model. The evaluations to be performed are important for giving an opinion to the implements about whether to pass to the following stage and redesign the process according to the needs of the teachers.

It is known that the belief of the teachers in technology from the point of applying technology to their lessons. Accordingly, the teachers should be encouraged to use the technology. It can be stated that the technology leaders are an important component of the Systems-Based Mentoring Model and the roles played by those leaders have a supportive effect on teachers for integrating the technology into their courses.

In conclusion, it is important for the integration efforts so that the teachers are supported by the expert people on the field enable them carry out that transformation. Accordingly, the Systems-Based Mentoring Model has importance for emphasizing the importance of technology leaders in encouraging and supporting the teachers during the integration process to reveal the roles of those leaders that should take over.

Keywords: Technology integration models; systems-based mentoring model; technology leadership; teachers



Learning at a Distance on Campus: Readiness, Expectations and Satisfaction Level of Engineering Students for Calculus Online

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With the widespread impact of information and communication technologies on education, higher education institutions worldwide have been challenged to integrate online technologies either in the form of fully online degree programs or in the form of supporting on-campus classes with online technologies to improve the quality of learning. Turkey is no exception in this endeavor, where particularly entry-level common core courses delivered to a big number of students have been transformed into online courses. More knowledge about the preferences and expectations of learners is crucial for a proper design of online classes, just like their satisfaction being a key indicator for the quality of such classes. To this overall aim to design an accurate, fully online calculus course for future, this study was sought to examine expectations and readiness level of learners as well as their satisfaction level during an inprogress calculus course supported with online technologies. The study expected to find answers to the following questions: (1) Are freshman engineering students ready for online learning in terms of technological knowledge and skills? (2) Are freshman engineering students ready for online learning in terms of motivation and attitude? (3) Are freshman engineering students satisfied with their online learning experience? Participants of the research are 1st year computer engineering and civil engineering students at Muğla Sıtkı Koçman University during 2014-2015 spring semester. A readiness and expectancy scale was administered prior to the course, which was followed by a satisfaction scale. Both scales included open ended questions. Readiness and expectancy scale included 26 items under five sub-dimensions: Personal Characteristics, Access to Technology, Technical Skills, motivation and Attitude, and Factors Affecting Achievement. Satisfaction scale included 18 items under six sub-dimensions: Use of Discussion Boards, Dialogue between Instructor and Students, Perceptions of Online Experiences, Instructor Characteristics, Sense of Online Community, Computer-Mediated Communication. Descriptive statistics was used to analyze quantitative data, and content analysis was conducted to analyze the open-ended questions. Findings show that students are generally positive about their perception of online experiences, instructor characteristics in general, and computer-mediated communication; yet they have relatively less positive feelings about the dialogue between instructor and students, which may be attributed to the nature of mathematics as a discipline, particularly in terms of online practical sessions where students have difficulty in writing mathematical concepts. Students are very positive about their online experiences owing to well-acknowledged advantages of online learning. Flexibility of time and place is appreciated by students because of the opportunity it provides them to access online courses wherever and to repeat classes whenever they wish, and also to have continuous access to course materials throughout the semester. Findings from the study provided valuable information on the preferences, e-readiness, and expectancies of students about online courses. Combined with findings from the analysis of satisfaction data,



the outcomes of this study would be an imperative input for the effective design of the calculus course, and shed light for other potential courses planned for online delivery.

 $\textbf{Keyword:} \ \ \textbf{Online} \ \ \textbf{learning,} \ \ \textbf{online} \ \ \textbf{mathematics,} \ \ \textbf{student} \ \ \textbf{expectancy,} \ \ \textbf{student} \ \ \textbf{satisfaction,} \ \ \textbf{e-readiness,} \ \ \textbf{e-satisfaction}$



Rethinking the Role of Entertainment and Playful Learning in ELT classroom

Rasim ÇÖMEZ

Hasan AKSOY

Little has been written to capture the role of entertainment and playful learning in ELT classroom. At Gendarmerie School Command, after administering Oxford Placement Test (OPT), among approximately one thousand first grader vocational school students, the ones who were voluntary to participate in the Supplementary English Course and concurrently acquired higher grades from the placement test were chosen to create the English classroom. The supplementary English course lecturers' opinions about the influence of the course which is carefully designed considering the demands of students with the idea of integrating entertainment and playful activities into course program, the significance of a co-created syllabus, the perception of students about self-directed learning and activities and their thoughts about the opportunity to choose among various tasks and exercises, and classroom climate are reported in this paper. This one-year case study is constructed on theories of playful learning and entertainment and relevant data is gathered through classroom observations and notes, interviews, and discussions on final version of assignments. In this 4hour weekly Supplementary English course, the content is formed according to the needs of students while keeping the notion of fun, playful learning and entertainment in mind. The results indicate that both students and teachers were satisfied with the course. Without getting bored and feeling trapped in a typical language classroom, they reported that they had great fun, and they mastered the content, too. The course helps them explore self-monitored learning, increase their confidence under non-stressed conditions and lastly learn the language.

Keyword: playful learning, entertainment, self-directed learning, co-created syllabus



Fun teaching! Fun Tech-ing! Interactive Educational games for Young Learners

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Language learning is really a difficult task. Much effort is required at every moment and must be maintained over a long period of time. Therefore, games may help and encourage many learners to sustain their interest and work. Games also help the teacher to create contexts in which the language is useful and meaningful. Games are highly motivating because they are amusing and interesting. They can be used to give practice in all language skills and be used to practice many types of communication. Our present day, the use of educational games in learning environments is an increasingly relevant trend. The motivational and immersive traits of game-based learning have been studied, but the systematic design and implementation of educational games remain an elusive topic. In this study some relevant requirements for the design of educational games in online education via technology and web 2.0 softwares will be analyzed, and a general game design method that includes adaptation and assessment features for young learners will be proposed. Finally, a particular implementation of that design will be described in light of its applicability to other implementations and EFL class settings depending upon the outcomes of Ministry of National Education in Turkey.

Keyword: History of mathematics, babylonian numerals, Pythagorean triples, case study, worksheet



From Babylonian Numerals To Pythagorean Triples

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In order to make the teaching of mathematics more relevant, one method is to include the history of mathematics in the learning-teaching environment. Previous studies have reported that utilizing the history of mathematics contributes to a positive attitude toward mathematics among students (McBride and Rollins, 1977; Haverhals and Roscoe, 2010; Lim, 2011), a rise in the success in mathematics (Leng, 2006; Glaubitz, 2007; Bellomo and Wertheimer, 2010), and molding the beliefs about the nature of mathematics (Kaye, 2008; Liu, 2009; Bütüner, 2014). The general purpose of the mathematics curriculum, which has been implemented in Turkey since 2004, emphasizes the significance of using the history of mathematics in class. However, the history of mathematics is presented in the (Turkish Ministry of National Education Publications) 6th, 7th, and 8th grade mathematics textbooks in the form of short historical pieces (life stories and pictures of mathematicians, pictorial representations of ancient numbers, book introductions, etc.).

According to the literature, such a depiction constitutes passive learning for the students. Thus, it is important to find alternative methods of applying the history of mathematics in class (Swetz, 1997; Fried, 2001). Moreover, it has been indicated that neither explanations nor guidance is provided in teachers' guidebooks regarding methods to integrate historical content into the learning-teaching process (Baki and Bütüner, 2013). Therefore, for compensating the aforementioned deficiencies, worksheets were prepared to enable students to learn the Babylonian number system, compare it with today's number system, and discover (based on the Babylonians number system) that the Pythagorean relation was developed by the Babylonians many years earlier. Consequently, students can actively study and realize mathematics' multicultural and dynamic structures. In case studies, which serve the purpose of answering how, why, and what, questions, an extensive research is conducted on a specific subject (Cohen, Manion and Morrison, 2007). Since the purpose of the present study is to collect students' opinions concerning the relevance of the history of mathematics and analyze the subject in more detail, an intensive case study was conducted.

Two worksheets were distributed among the students as a part of this study. The first worksheet comprised pictures of Babylonian clay tablets and questions that enabled the students to understand the Babylonian numeration system. In the second worksheet, the students were asked to study two different Babylonian clay tablets to enunciate to them that the Pythagorean relation was known to the Babylonians. The activities, performed individually, were conducted with 27 eighth-grade students, and observations were made by the researcher during the activities. The students were asked to express their opinions about the activities, upon completion. A written opinion form comprising four questions was used. The first question on the written opinion form was regarding whether they had ever performed



such an activity before, while the second question asked whether they found the activities interesting. Finally, in the third and fourth questions, the students were asked to express their opinions regarding the challenging parts according to them and about the completion of the activities, respectively.

Findings revealed that majority of the students stated that converting the Babylonian numerals into modern numbers was difficult and time-consuming. However, they were surprised to know that the Pythagorean relation had been previously developed by the Babylonians. Moreover, they learned that mathematics was an evolving multicultural and dynamic discipline through these activities. This study results are consistent with those by Krussel (2000) and Kaye (2008). In their study, students learned that mathematics is an ongoing and alive field of study, rather than a static one. They were able to appreciate a human element to mathematics. Although the present study's approach was effective, further studies may employ different methods of using the history of mathematics as well as surveying students' positive/negative opinions about the practices.

Keywords: History of mathematics, babylonian numerals, Pythagorean triples, case study, worksheet



Active Learning Geometry With Tangram Puzzle

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The aim of this study is to remove students' prejudices and attitudes towards mathematics, to present applicable methods that can be used and and is to popularize mathematics by making mathematical applications according to the students' level. It is given also an alternative way to be able to calculate and predict the relationship between all the parts area of the geometric shape gradually presented. In this study, it questioned the importance of learning geometry and mathematics by touching and looking with the help of materials or tools. One of the tools is a Chinese tangram puzzle. It consists of seven geometric shapes: two small triangles, a medium triangle, two large triangle, a square and a parallelogram. Firstly, fourth and fifth grade primary school students have made their own Tangram. Thus, it was provided to be able to understand the properties of geometric shapes (isosceles right triangle, square, parallelogram, trapezoid, rectangular). Then some of the tangram shapes were hung on the board and wanted the students to do them and it was observed that they learned with fun. During the study, it was aimed to improve the students' logical-mathematical, visual-spatial and bodily-kinesthetic intellegence ability. In this context, they estimated the area of triangle, square, parallelogram, trapezoid, rectangular without formulas. The students were asked to indicate the relationship between some parts of the whole as the rational number. The classroom was prepared that the students could express themselves indivually and in a group. They shared their results and different methods in classroom. During this intruction, their positive attitude towards learning with the help of the materials or tools was observed.

KeyWords: Tangram puzzle, rational number, geometric shapes



Effect of Instruction with Concrete Materials to Mathematics Success of 11th Grade Students

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The aim of this study is to investigate the effect of instruction supported by concrete materials on the summation symbol, summation rules, summation of the sequences on 11th grade students learning and success. In the study, instruction with traditional methods and the instruction supported by concrete materials is compared.

Mathematics is generally a difficult lesson for students, also it is boring for many students. Mathematics success of Turkish students is not in an expected level. On the contrary to the instruction with traditional methods, instruction supported by concrete materials gives the students an opportunity of being an active participant of the lesson and thinking on the mathematical concepts. Researches about the concrete materials are generally in lower grades (1-8) but there aren't sufficient studies for higher grades (9-12). The study has a significance of improving learning and mathematics success of students and also aims to meet a need by investigating the effect of concrete materials in higher grades.

The research was applied in Bakırköy İmam Hatip High School in İstanbul. 49 students from two different classes who were in the 11th grades were involved in the study. Students in the control group were taught with paper-pencil approaches and traditional methods while the students in the experiment group were taught with various concrete materials by the researcher. Quasi-experimental design with experiment and control groups was used. The beginning of the subject, "what is the sequence", "notation of the sequence", "summation symbol" was taught with traditional methods to both the students in control and experiment groups. Then students were given pre-test before the application. Immediately after, subject was told with traditional methods in the control group while the students in the experiment group were wanted to make their own groups. The groups with 4-5 students studied cooperatively with the special concrete materials which are designed for the subject. The materials are consist of wood unit cubes and they represent number sequences. Then all students were given post-test after the application.

The datas obtained were analysed by the SPSS packet program and compared by independent t-test. First, mean scores of the group's pre-test was compared. There was no statistically significant difference. Secondly, for answering the question; "Did the instruction with concrete materials effect the success of the students in the experiment group?" mean scores of the experiment groups' pre-test and post-test was compared. There was statistically significant difference. The mean scores of post-tests were higher than the mean scores of pre-test. Thirdly, for answering the question; "Did the instruction with traditional methods effect the success of the students in the control group?" mean scores of the control group's pre-test and post-test was compared. There was statistically significant difference. The mean scores of



post-tests were higher than the mean scores of pre-test. And finally for answering the question "Is there any significant difference of the student's success after the instruction who were taught with concrete materials in the experiment group and who were taught with traditional methods in the control group?" mean scores of the groups' post-test was compared. There was statistically significant difference. The results showed that the students who were taught with various concrete materials were more successful than the students who were taught with paper-pencil approaches and traditional methods.

In the study, students in the experiment group were asked about their opinions and feelings about the instruction with concrete materials. All of them gave similar answers. They said working with the concrete manipulatives were interesting and enjoyable. We didn't study with concrete materials in mathematics lesson before. We felt more intelligent while working with the materials. We learned better.

Students in 11th grade are in formal operational stage according to Piaget's theory but study results shows mathematical abstraction is still difficult for this grade students and working with concrete materials help students to understand mathematical concepts and symbolize mathematical ideas. So concrete materials should be used frequently in a total mathematics program in a way consistent with the goals of the program.

Keywords: Manipulative, mathematic instruction, summation symbol, summation rules.



Technological Pedagogical Content Knowledge of Prospective Middle School Mathematics Teachers

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Developments and new applications in technology make technology an important part of education. Technology contributes new methods and approaches to educational activities. A lot of studies highlighted that teachers should develop their content knowledge by integrating technology and develop their ability about teaching with technology (Mishra & Koehler, 2006; Niess, 2005; Pierson, 1999). Moreover, in teacher education programs, it is stated that preparing learning environments in which technology is used effectively has a positive impact on development of prospective teachers' technological pedagogical content knowledge. In addition, mathematics education programs in various countries highlighted the importance and necessity of teaching mathematics with technology (NCTM, 2000). In a similar way, mathematics education programs in Turkey emphasized that computer-assisted mathematics education should not be an option, but should have a complementary role for the system (MNE, 2005). In such a context, the role and knowledge of teachers about technology becomes critical. Therefore, the purpose of this study was to investigate prospective middle school mathematics teachers' technological pedagogical content knowledge (TPACK). Data were collected from 427 prospective middle school mathematics teachers with different grade levels attending three public universities in Turkey during the spring semester of 2014-2015. The subjects of the study were 330 female and 97 male prospective teachers. Technological Pedagogical Content Knowledge Scale (TPACK) developed by Schmidt and others (2009) was administered to middle school mathematics teachers to investigate their technological pedagogical content knowledge according to gender and grade levels. The adaptation of the scale to Turkish was done by Öztürk and Horzum (2011). The scale had 47 items and seven factors. Items in the TPACK have a five-point Likert scale ranging from 1 to 5; 1 indicating 'strongly disagree', 2 indicating 'disagree', 3 indicating 'neutral', 4 indicating 'agree', and 5 indicating 'strongly agree'. The Cronbach Alpha reliability coefficient of the scale was .94. Since the Cronbach alpha coefficient of a scale should be above .7 (Pallant, 2007), the Cronbach alpha coefficient was considered reasonable value for this study. Data which was gathered from questionnaire analyzed on SPSS program quantitatively. A two way analysis of variance (ANOVA) was used to determine differences in technological pedagogical content knowledge, as measured by TPACK, between prospective teachers from different grade levels and between females and males. There was a statistical significant main effect for grade level [F(3,419)=3.21, p=.02], however the effect size was small (eta squared=.02) (Pallant, 2007).



Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the first grade prospective teachers (M=3.33, SD=.46) was significantly different from the fourth grade prospective teachers (M=3.54, SD=.46). The second grade prospective teachers (M=3.40, SD=.51) and the third grade prospective teachers (M=3.39, SD=.40) did not differ significantly from the other grade levels. The main effect for gender [F(1,419)=2.39, p=.12] and the interaction effect [F(3,419)=.81, p=.49] did not reach statistical significance. Further studies should be conducted not only with the prospective mathematics teachers, but also with the in-service mathematics teachers. Besides, the continuum of development process of technological pedagogical content knowledge of prospective and in-service teachers' beginning from early stages of teacher training program and during their classroom practices should be examined and also the effect of experience or other related factors on the technological pedagogical content knowledge construct should be investigated.

Keywords: Prospective teachers, technological pedagogical content knowledge scale, technological pedagogical content knowledge, mathematics teachers.



The Effect of 3 Dimensional Computer-Based Material About Learning The Concept of Meiosis

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In today's era, the more technology develops in a remarkable speed, the more modern instructional technologies improve. Accordingly, there has been some changes in the field of education. The fact that these changes have been positive is because the use of modern technologies has a significant role. It's known that the use of technology, especially computers, in the field of education has an important effect on students by helping them to get a better understanding of topics. It provides these topics to be permanent because it refers to students' sense organs effectively. It's observed that there is a more productive environment when visual aids like animations, sounds or pictures are used and this makes the education system unconventional (Clark and Craik, 1992).

There should be taken advantage of computer technologies instead of traditional education tools to present information in appropriate circumstances. (Karput,1991). Besides, while preparing educational materials based on technology, the socio-cultural, pyhsical and cognitive features of students should be taken into consider. Students who differs from these features comprehend the materials distinctively. Therefore, it's not possible to expect that a material can be comprehended similarly by all students. This also makes building the material harder than it's thought. That's why computers and computer softwares should be organized according to the needs of all students to make them understand the topics easily(Akpınar, 1999)

The use of computer softwares has a fundamental role in the field of education to make educational tools effective. It's stated that especially animations, sounds and images in the digital environment are effective methods due to the interaction they create. Therefore, these technologies make learning process easier by presenting learners different variations. Consequently, it's important that the material refers to sense organs (Er et al,2015). It helps to make learning permanent in mind by embodying topics and concepts which are comprehended unclearly.

Besides, there are many abstract concepts in the field of science. Concepts in biology, which are abstract in general, are comprehended unclearly by students. Hence, there's needed to use materials, which refers to many sense organs, to have students understand the topics. According to the conducted studies, computer-aided materials can meet this requirement (Saka, Yılmaz, 2005).

When these studies are considered, we see students have the most difficulty to understand the concept of cell division, one of the concepts in biology. It appears computer-aided materials



aren't used effectively while teaching this concept. Therefore, there is an emphasis on this issue in present study. The purpose of this study is to improve a computer-aided, educational material about the concepts of meiosis, a concept which the teacher candidates hardly understand, in the unit of cell divisons, in the syllabus of sophomore students, and with this material to determine the success level. This study is conducted with 99 students(50 experiment,49 control), studying in a state university in spring term of the academic year of 2014-2015, and it's based on the control group which has pretest-posttest design within the context of quasi-experimental study. The results of the pretest-posttest design are analysed by using t-test with the SPSS package software, oral interviews are analysed by common grounds, and results of observations are analysed by the reactions of the students to the implementation. Within the study, about the concepts of meiosis, which students hardly understand, an educational material that has a three dimensional software is improved by choosing the most appropriate design software, 3D Max. According to the results of findings, it's understood that educational material has an effect on increasing students' success about understanding of the concepts of biology, especially the concepts of meiosis in the unit of cell division.

As a result of this study, there should be educational softwares in this field which should be prepared in a better way to improve and to use different materials more effectively. It appears, in this sense, people who improve the material have significant duties. Educational materials improved by computer-based biology instruction should be used by students in terms of the levels of being effective as a result of pilot schemes.

Keyword: science instruction, computer-based material, meiosis, experimental method



The Process of Formation of Personal Knowledge With Constructive learning

Gulnara Nebiyeva

This article explains how students construct their knowledge through the carried out constructive learning course.

Revolutional reforms have been taking place in the field of education in Azerbaijan. The main strategy of the reforms is interactive teaching.

Earlier in the past, students were expected to learn through transmission of the knowledge. Even though students independently critical thinking and ability of pursuing the knowledge under the guidance of the teacher's knowledge is given more attention with the recent educational reforms, it appears that this reforms do not meet todays expectations in the era of rapidly developing technological society

Society demand from new generation of students to constantly update their knowledge, coordinate and match them to each other, work collobratively, construct a new knowledge with respect to his or her previous knowledge, and convert them into practical way. This demans require a new approach to the teaching proses and by means of cognitive constructivism, and social constructivism, this demand can be supplied.

Understanding in pedagogical process occurs via use of educational technologies and teachers giving an opportunity to students to receive the knowledge and establish it up on a previously existing form which contributes to highly quality learning. As a result, students' cognitive and social skills are formed. The main purpose of the study in a constructive learning environment is to expand the intuitive knowledge of students on the subject, and strengthen through brain storms and works.

The goal of the lesson is to reach each stage tied to each other. Firstly, meaning of the subject matter is made clear for the students. Teacher adds supplementary information related with the content and help students so that they could convert the information to construct a new knowledge. Afterwards, gained knowledge is reflected in the exercising sheets and made strengthen on the mind.

Answering the questions directed by the teacher in the every stage of the lesson, students do ascend their primitive level of knowledge and put on a new meaning. Questions and grounds set in the constructive lesson, is first discussed within the group mates and then whole students in the classroom. During these discussions, students do not only share their knowledge, but also get others knowledge. As there is a powerful interaction and collaboration between students to solve questions during discussions, each answers by students becomes a meaningful knowledge in return.



Comparing the outcome of the courses conducted with constructive learning methods and current teaching methods, significant differences revealed out after implementations. Results of the study indicates that most important difference seen in the students perception towards shaping the knowledge and practical usage of the gained knowledge, which is considered as the most important and valuable skills to develop in todays world

Keywords: constructive learning; knowledge; transmission; intuitive knowledge; interaction and collaboration; meaningful knowledge



Examination the Digital Competence of Teacher Candidates in Terms of Different Variables

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It has been essential to make use of technology in education as a result of the improvements in information and communication technology in the 21st century. Thus, it has been a necessity to train individuals who are away from the digital divide that is defined as the gap between the masses who can make use of information technology effectively and who do not have access to information technology due to lack of education (Uçkan, 2009). The "digital divide" mentioned here not only defines the economic opportunities, but also the ability to use the digital environment once it has been accessed and the technology possessed to use the digital environment efficiently. Cullen (2006) addresses the digital divine in three steps; the early period, the first period and the second period. The early period refers to the divide between those who have access to digital technology and those who do not; the first period refers to the divide between those who have access, in other words, the users and the nonusers; and the second period refers to the divide according to the quality of use (Quoted: Akkoyunlu and Yılmaz Soylu, 2010). It is critical that teachers, the most important component of the integration of technology into education, be analysed about their competence levels of using technology, be away from the digital divide, and be aware of this concept. It has been a necessity to reorganize the learning environments in order to help students to use technology consciously and effectively, in other words, to acquire digital competence. Teachers, who are the organizers and the developers of learning environments, need to have a high level of consciousness with regard to digital competence. Thus, students can acquire digital competence only if teachers do it first. The aim of this study is to analyse the digital competence of preservice teachers in terms of different variables. The study group consisted of 200 preservice teachers who study at different departments of Ahmet Keleşoğlu Faculty of Education, Necmettin Erbakan University. Screening model was used as the research method in the present study. As data collection tools, a personal data form which was developed by researchers and by which the demographic characteristics of the study group students were obtained, and "The Digital Competence Scale" which was developed by Akkoyunlu, Yılmaz Soylu and Çağlar (2010) were used. The scale is 7 Likert type, 45 item and of four dimensions. Cronbach Alpha coefficients were calculated for the results of the scale reliability; and they were 0.86 throughout the scale, 0.94 in the first sub-dimension (Awareness), 0.84 in the second sub-dimension (Motivation), 0.78 in the third sub-dimension



(Technical Access) and 0.81 in the fourth sub-dimension (Competence). The computer-aided statistical packaged program, SPSS was used in order to analyse the data collected, and the present study benefited from descriptive statistics, t-test, one-way analysis of variance and correlation methods. The study concluded that - when the digital competence of preservice teachers was assessed in terms of gender in sub-dimensions of the scale - the digital competence awareness and the technical access levels of both male and female preservice teachers were high, however, their digital competence and motivation levels were close to low. Also, it has been revealed that overall average scores of preservice teachers from different branches differed significantly. Preservice teachers also differed significantly in having Internet and computers. Thus, positive steps need to be taken for the integration of information and communication technology into classes before preservice teachers are graduated from faculties, preservice teachers need to be assisted to use information and communication technology both in daily and educational life, and they need to be guided to acquire using skills of technology. Internet zones need to be developed so that preservice teachers can exchange their knowledge and experience with friends. An easily, cheaply and constantly accessible Internet infrastructure may be constructed among universities and schools, and applications may be developed so that preservice teachers and lecturers use in order to come together in different educational environments.

Keywords: Digital competence level; teacher candidate; technology integration; information and communication technologies



Graduate Education in Translation Studies – Observations, Experiences and Forethoughts

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1983 marks the date when translation studies began to be offered as a separate BA degree, only to be followed by graduate programs. Number of translation departments that offer BA degrees boomed after the year 2000. Likewise, number of MA programs are many, and they date back to the beginning, yet, PhD is another story. PhD programs falls short to supply the demand of many BA graduates. For many years, PhD program in Boğaziçi University was the sole one to offer a separate degree in translation studies, Meanwhile, PhD studies?? in translation proceeded under different fields. Subjects such as literary translation under philology departments or language acquisition through translation under education departments were well received due to their interdisciplinary nature. Several PhD programs are being conducted in different universities since 2007. How other fields in which thesis on translation are proceeded reflects the difference, and how they developed through this process are another questions worth investigating. An institutionalized PhD degree within an autonomus academic framework is quite rare and thesis which contribute to this particular field may be under other disciplines as well. It is obvious that institutionalization of graduate studies as means of transmitting knowledge about the field and method to translators, educators and researchers is a must. Also, re-evaluating graduate education which is reconstructed by European Higher Education Area is another subject for discussion. After providing and overview on the matter, I will present my observations and experiences on graduate studies within the framework of their importance and places in this particular scientific discipline. I will try to distinguish the function of PhD by focusing on the programs on this field. I will also analyze the connection between needs of translation market and scientific studies aside from PhD's primary function of breeding academics on the given field. By keeping graduate programs in the world in mind, I will discuss how academic background in Turkey provides for graduate program of translation studies. Ongoing programs and field actors' opinions will be taken into consideration, thus, a critical method will be held towards understanding the condition. Building upon this basis, I will provide my own views as well as some solid prepositions for further discussion.

Here are the main questions I would like to discuss:

- What is the difference and relation between expertise and scientific field study in translation profession through BA and graduate degrees?
- Looking through different examples of various institutions, can we see their approaches reflected in the contemporary translation studies?
- What are the challenges of providing high quality translation studies graduate education? How does student profile affect it? What are the shortcomings and strong points of PhD programs within our country and in certain other areas?
- How does the Bologna process that frames European Higher Education Area affects the graduate studies? What does 'master's degree' mean?
- What could be the special purposes in certain masters and PhD programs in translation studies?



- What is the graduate degree program distribution in foundation universities; what are the requirements for opening and sustaining graduate education?
- What can be done to provide an interdisciplinary, inter-institutional and international high quality graduate education with, for example, the framework of 'center of excellence' as described in Bologna Process?

Keywords: Translation studies, graduate education, professional expertise, scientific researcher competence, european higher education area, foundation universities



Academicians' Views on Constructivist and Operational Learning In Science Education

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This study aimed at determining the opinions of academics on the importance of balancing the conceptual and operational learning and in accordance with these views establishing the process steps in physics problems. The sample group of the research was composed of eight faculties employed in Science, Mathematics and Physics Education in Ağrı İbrahim Çeçen University and Atatürk University. In this study, 12 interview questions which are prepared with the aim of identifying the descriptions and steps of cognitive and operational learning are grouped based on phenomenographic approach which is an explicative approach. As a result of grouping, four different categories (A, B, C and D) have been formed. It is aimed at; identifying the relations between cognitive knowledge and operational knowledge in category A, identifying the importance of cognitive knowledge and operational knowledge in science education in category B, expressiveness of cognitive and operational learning and examination of the influence on each other in terms of permanence in category C, while in category D, it is aimed at examining the influence of learning mathematics and learning physics on each other. According to the results gained from the interviews, it is stated that cognitive learning and operational learning are of crucial importance in science education, operational knowledge includes cognitive knowledge and vice-versa, having gained the cognitive knowledge (or might have) has influence on gaining operational knowledge, whereas having gained the operational knowledge might not have influence on gaining cognitive knowledge, it is necessary that cognitive learning and operational learning be balanced, in case the balance is ruined/disturbed (in case of unbalance) the students might set up positive relations with their permanent learning, various factors emanating from teacher, student, educational system have influence on difficulties experienced by the students in using mathematics for solving physics problems. At the end of the use of conceptual and operational knowledge in balance leaning will be more healthful, permanent and more meaningful.

Keywords: Constructivist learning, operational learning, science education, physics education, operational learning steps, academician views



The Effect Of Formative Assessment Techniques On Students' Academic Succes And Their Attitudes In The Unit Of 7th Class "Solar System And Beyond: Space Puzzle"

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This study, following the changes in the science education programme, has been carried out to remind the availibility and the use of alternative assessment activities in the field of assessment beyond the traditional assessment techniques. In the study, in the unit of "solar system and beyond: space puzzle" of primary education seventh class lecture, the effect of practices of the group assessment, self-assessment and peer-assessment which are parameters of formative assessment on the academical successes and on the students's attitudes of towards the science was examined. Pre-test, post-test, semi-experimental modal with experiment and control groups were used in this research. By examining formative assessment, the place is given to self-assessment, peer-assessment and group assessment which are parameters of process assessment. Then, following the process assessment practices carried out on/by experiment group, by asking the student to fill in self, group and peer assessment forms, feedbacks were obtained and students' deficiencies were made up. As for the control group, by applying direct expression technique which is a conventional technique lecturing was ensured. As a result, very small difference was identified between experiment and control groups or, in terms of students' attitudes towards science. It was concluded that average success obtained from the process assessment activities carried out on the experiment group was quite high.

Key words: science education, formative assessment, solar system and beyond: space puzzle, academic success.



How to Use the Kinect in Educational Environments: A Literature Review

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Computer and video games are valuable for student learning in educational environments. The most important factor for using games in education is motivation and engagement. Due to these properties games have received interest from researchers for a long time in the literature. Also, games which have been designed to support curriculum are also used to create spaces for immersive, experiential learning and teaching. One of the most interesting ways a gamebased learning environment is being implemented is with the use of Microsoft's Kinect. This paper analyzes studies using the kinect technology in educational environments and discusses how it can enhance teaching and learning. Kinect is a motion sensor, designed by Microsoft for the Xbox 360 video game console. This sensor incorporates several advanced sensing hardware. It contains a depth sensor, a color camera, and a four-microphone array that provide full-body 3D motion capture, facial recognition, and voice recognition capabilities. This technology has various application areas in the educational environments. Especially, kinect based environments could be used as an example of game-based learning that is popular in the literature. Recently, researchers agreed that the design of an engaging, interactive environment using a game-based approach can help students have fun while learning. Kinect as a new technology for game based educational environments is a new research area in the literature. It could be used mainly for several aims in several educational environments such as, classroom instruction, special education programs and physical education. In classroom instruction, researchers stated that kinect could be used for designing a cost effective technology-enhanced teaching classroom. In special education, several studies showed that kinect could be used effectively to people with special needs. In physical education and sports training, kinect provides an important help for realizing the real-time motion capture. In summary, kinect is capable of being a tool to enhance teaching and learning. Especially as a learning tool, it has great potential to create enjoyable, interesting interactions types, to enhance student motivation, and to promote learning via its multimedia and multi-sensory capacity. On the other hand, kinect technology cannot stand alone in the educational environments, it needs to be integrated with a computer, projector and software. Even though kinect having different properties are being tried to adapt classroom environments, physical education and sport field in an effective and efficient manner, it is still need good examples in the literature to generalize its properties for all environments. As a result, we summarized what we have learnt from the studies related kinect technology so far in this study.

Keywords: Kinect, Interactivity, Educational Technology



Examination Of The Relationship Between Teachers Candidate's Learning Approaches and Academic Engagement

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Nowadays, by the effect of technological development, the amount of information generated increases quickly. Therefore, individuals must be able to acquire new knowledge and develop themselves continuously. At this point, the individual approaches to learning and academic engagements are two important concepts. Marton and Saljo (1976a, 1976b) learning approach concept is explained by the studies, how individuals engage the learning business and how they understand some reading part (as cited in Önder and Beşoluk, 2010). In this studies qualitative research is done about how students work on a text given. Some of the students in the study group, realise the text they read, as the sum of the separate information units that must be memorized in order to respond to questions, and the other part is seeing the text as a whole, have tried to grasp the underlying meaning of the author's view and catch the meaning of the text. In the first case learning approach shown by the students is "superficial approach", the learning approach in the second case is named as "deep approach" (as cited in Önder and Beşoluk, 2010; Yılmaz and Orhan, 2011). The academic engagement is explained by Pascarella and Terenzi (2005); as individual effort, academic, interpersonal and extracurricular effort of the students entering the communication with the extra work. This definition emphasizes the active participation of students in the learning process. Because the academic engagement is not a specific time period and is not an evaluation of the student's efforts in a specific period spent by individuals but it is the effort spent during the entire course process. In studies performed in our country the relationships between; academic achievement and learning approaches (Ellez and Sezgin, 2002; Sezgin Selçuk, Çalışkan and Erol, 2007), metacognitive perception and learning approaches (Karadeniz Bayrak and Erkoç, 2008), locus of control and learning approaches (Olpak and Korucu, 2014), learning approaches and academic self-efficacy (Çuhadar, Gündüz and Tanyeri, 2013), thinking styles and learning approaches (Korucu and Olpak, 2014) are investigated and as the predictors of students learning approach the epistemological beliefs are researched (Şahin Taşkın, 2012). However, for effective learning experiences it has not found any study about the relationsip between learning approach and academic engagament. Therefore, in this study it is aimed to investigate relationship of the teacher candidates lerning approach and academic engagament. This research was carried out with 194 students according to the survey model, 2014-2015 academic year spring semester, Ahi Evran University and Necmettin Erbakan University of the students studying in CEIT Faculty of Education, who answered questions appropriately from the data obtained. The data were collected with study process questionnaire adapted to Turkish by Yılmaz and Orhan (2011), academic engagement scale developed by (Korucu, 2013) and developed by the authors the personal information form. For the data analysis; descriptive statistics and simple correlation were used. Scores the students received from study process questionnaire; between 194 students in the study group; 137 students have deep



approach, while 57 have superficial approach. Research findings showed that; the students scores received from the deep part of the study process questionnaire and academic engagement scale; are moderate, positive and have a significant relationship. However the students scores received from the superficial part of the study process questionnaire and academic engagement scale does not have a significant relationship.

Keywords: learning approach; deep approach; superficial approach; academic engagement.



Knowledges' Appropriation And Creation Methods

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Goal of each subject program is appropriation and application of program's knowledges by the pupils. Teachers use traditional training methods, new training methods and ICTs in order to achieve this goal. However, appropriation has been directed on memory as psychological process. Application of appropriated knowledge means appropriation of this knowledge's application competently by pupil. Executive structures are created in individual's thinking under order along this process. However, requirement assigned by current technological period before school- is to bright up creative people. Although training is directed on creative side, each pupil can develop creative capability depending on their internal abilities.

Reforms have started by support of Word Bank since 2007 in Azerbaijan education and National Curriculum has been created. Traditional training process has been replaced with active training process massively and new knowledge, skills standards have been created.

Training goal of curriculum is appropriation of the knowledges in pupils' programs. Knowledges' appropriation is in the first level in J.Blum's cognitive taxonomy. Hereinafter, there is notion, application, analysis, synthesis and assessment level of knowledge.

Goal of Curriculum which keeps the first and third level doesn't meet demand of period that develops rapidly entirely. Training goal should be changed in order to meet demand of time. Knowledges' appropriation should be replaced with knowledges' creation. It means transition from active training to constructive training. How this transition should be?

- 1. Training activity should be changed. Pupils should be in a strong interactive action and should discuss every assigned questions, given tasks, video images. Significant point of this action is that, there is team internal knowledge distribution, knowledge of each individual changes its borders as new vision.
- 2. Structure of given tasks should be changed. Tasks should be thoughtful, creative along with instructive character. Joint work activity of separate thinking forms play decisive role in team performance of such kind of tasks and more type thinking gradually is formed but not single type thinking.
- 3. Structure of the questions should be changed. Why thoughtful questions along with knowledge, notion questions? Reason question- what is the reason? Creative question-how you do it? and it should be for example, choose appraiser questions and why did you choose it?. It's possible to use key words of J. Bulum's taxonomy in order to create the questions.
- 4. Structure of the questions should be changed. Knowledges are learned as single in curriculum programs. Its internal relations are weak and mostly they have not connection each



other. Therefore, knowledges should be presented for learning in logical structure, coordinating and associative form. How much relations are presented, as much as its connection with personal knowledges is created. In this case, this created knowledge is evaluated as new knowledge.

5. Structure of the knowledges placed in the programs used from ICTs should be changed and be in thoughtful direction. Information placed here should be transferred as single information. They should be accompanied with thoughtful questions and tasks. In this case, this logic is substantiated in order to convert these images, details. In this case, each pupil create new knowledges through coordinating this logic with his practice and obtained knowledges.

Such conslusion is made while investigating comparison of active training and constructive training (F. Bunyatova) with created lessons:

- Questions are thoughtful and creative along with ranging from smiple to complex in constructive training;
- Strong interactive discussion is made in constructive lessons. It's available to reach every new knowledge during discussion;
- Thoughtful questions are put in order to make cause and conclusion of process's course taking into account instructive character of practical works in the lessons on technical lessons.
- Unlike active training, teacher notifies the pupils about topic of lesson in constructive training. Teacher develops teaching through detecting conformity to lesson's goal from pupils' obtained knowledges.
- Knowledges are presented in interdisciplinary and intersubjects integration in constructive training. This approachment enriches the pupils through creating association in the pupils' knowledges;
- Questions and logical bases assigned in the lessons created with constructive training are discussed inside of team and class. In this case, intensive distribution and updating of the knowledges are observed.
- There is a strong pupil-pupil-teacher collaboration in the lessons created with constructive training. Social skills along with academic and intellectual abilities are developed in this training.

Each appropriated or created knowledge should be kept in knowledge structures of thinking. "We keep in our mind" table of American scientist William Glasser points in which condition learned knowledges are kept.

10 % from our reading;
20 % from our listening;
30% from our observation;
50% from our observations and listening;
70% from dicussion with the others;
80% from our personal practice;
95% when knowledge is transmitted in other

According to this table, 95 % of the knowledges is kept during knowledges' discussion and distribution. This proces is one of main principles of this process.

Conclusion:

Difference between lessons created by active training and lessons created by constructive training is that, pupil appropriates the knowledges by teacher's guidance in the first, but in the



second creates his knowledges. Pupils who are trained in creation process can develop their creative activities through creating mental tools in their thinking and turning them into their thought tools then creating their knowledges..

Keywords: knowledges, creation, curriculum, constructive learning, active learning



Views about leisure activities of the students studying in The Faculty of Education

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Leisure time nowadays is one of the most important factors that increases and develops one's quality of life. This also contribute one' finding oneself, renew and reveal himself. leisure time is important not only in individualistic perspective but also in the perspective of social and national, this also contribute cross-cultural communication and has an important role in increasing one's experience in globalizing society. In this meaning, recreation facilitates and supports change via providing opportunity in one's imagination (Edginton, 2007).

Recreation refers to one's personal preferences except occupation that is neccessary for living. According to another definition recreation means the time that one spend except sleep, rest and work. The evaluation of this time refers to personal or group activities for gratification and satisfactin (Karaküçük, 1999). This concept usually get involved with recreation but it is generally a time except working and a part of recreation (Demir ve Demir, 2007).

Leisure time is dual. It provides appreciation of art, music and science, develops our abilities and also cause distress, depression and idleness (Zorba ve dig. 2001). In modern times, individuals disconnect to external world and need to follow agenda. This situation also accurs in individualistic and institutive basis. These needs are visual media such as newspaper, journal, book (Tel, 2007). Participating leisure time activities differs according to students, workers and gener. Hudson found significant differences according to gender in participating leisure time activities (Hudson, 2000).

The purpose of this research is to determine the views of students studying in the Faculty of Education about their leisure activities. Our research was carried out with interviews method which is a way of qualitative research method.

88 students who are studying in Department of Psychological Counselling and Guidance/Faculty of Education in Necmettin Erbakan University participated to the research. 52 of the participants were girls while 36 of them were boys. Participants voluntarily participated to the study. Semi-structured interview forms were taken from participants in written form. In this study;

- -leisure activities Department of Psychological Counselling and Guidance Students,
- -which psychological needs they do these activities for,
- -the effects of these activities both on their lives and their scholarship and
- -their views about the places in which students need to go on these kinds of leisure activities were all examined qualitatively just to obtain data from different perspectives, . Information obtained from the semi-structured interview forms were analyzed using content analysis method. The data obtained from this analysis were set into themes and categories. These themes and categories will be shared in full text and in the presentation.

Key words: Leisure, Psychological Counselling and Guidance Department students, Leisure activities, psychological needs.



The Use of Language Learning Strategies in Coursebooks

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Language Learning Strategies (LLS) are some kind of techniques that help students with learning a second or foreign language. Green and Oxford (1995) defines language learning strategies as specific actions or techniques that students use, often intentionally, to improve their progress in developing second language skills. Language learning strategies became the subject matter in the field of language learning in 1970s, and it has been understood that Language Learning Strategies have a crucial role in the language learning and teaching process. As Oxford (1986) states LLS improve language performance, encourage learner autonomy, and expand the role of the teacher in useful ways. Also, Rubin (1975) indicated that if instructors knew successful language learners' strategies, they could help less successful learners. As European countries studies about LLS have gained popularity in recent years in Turkey. For example, In Turkey, Hismanoglu (2000) investigated the ideas of different researchers about Language Learning Strategies and he evaluated all the classifications based on the variables such as gender, and class. Also, Alptekin (2007) investigated whether there were differences while choosing a Language Learning Strategy and what was the frequency of the strategies while learning two foreign languages in a formal and an informal language learning environment.

There have been many classifications by various field researchers depending on variables. For example, Oxford (1986) divides LLS into two groups; Direct and Indirect Strategies. Also, O'Malley and Chamot (1990) classifies LLS as Metacognitive Strategies, Cognitive Strategies, and Socioaffective Strategies. Classroom materials form an important part of language learning and teaching process. Coursebooks are one of the most important teaching materials in language classrooms. According to McGrath (2006) coursebooks are key element in language teaching and learning and also states that "coursebooks will tend to dictate what is taught, in what order and, to some extent, how as well as what learners learn." Also coursebooks play an important role to apply language learning strategies to the classroom activities. LLS are used in the coursebooks explicitly or implicitly.

This study aims to investigate the use of language learning strategies in the English language coursebooks in Turkey. 2nd to 8th grade coursebooks have been chosen from state schools and language learning strategies used in the coursebooks have been defined according to Chamot and O'Malley's language learning strategy classifications. The study is intended to provide answers to the following questions: Which language learning strategies are used in the English language coursebooks in primary and secondary schools? Are there any differences between the language coursebooks as for the strategy use? At the end of the study, the results are discussed and compared with other European countries' language strategy use in their language coursebooks.

Key Words: Language Learning Strategies - Young Learners - EFL Teaching/Learning - Coursebooks



Opinions of Students Who Attended 2015 Timss And Teachers About The Exam: Sample Of Ağrı

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TIMSS (Trends in International Mathematics and Science Study), is an international serway study that was held to evaluate the 4th and 8th grade students' knowledge and their skills in mathematics and science at four-year intervals by International Educational Assessment Agency IEA Success (International Association for the Evaluation of Educational Achievement). In our country TURKEY, the TIMSS studies are conducted by Ministry of National Education (MNE) Measurement, Evaluation and Examinations Services. Shortly Timss is defined as the researches of international science and mathematics educations. This survey study is conducted by the International Sudy center in BostonCollege-TIMMS PIRLS. The research to which many country across the globe has participated is a project which affects the education policies of the participatory countries. The aim of this study is to bring out the opinions of the 8th grade students who attended timss 2015 and teachers about the exam. This study has been conducted under case study approach. Case study method offers opportunities only in the case of searching the subject in depth but holistically within the context. Moreover the case study method is suitable to design and analyse for both quantitative and qualitative researches. The study was conducted with 24 students studying in the relevant class of a secondary school of Agri province centre where the exam is held and 6 teachers who give science and mathematic lectures in this school and at the same time participated in TIMMS activity as controllers. The data were collected through a queationnare prepared by the researchers. Data were collected through written comments from the students and interviews with the teachers and then these data obtained from the study were subjected to descriptive and content analysis. In the study analysis were presented seperately as descriptive analyse and content analyse. As a result of the study, it was concluded that the students havent adequately prepared for the timss exam due to The (Transition to secondary education from the basic education) exams, the questions were hermeneutical rather than requiring knowledge and awareness level of the teachers are low. An important part of the students (about 46%) have found the questions asked in Timms test more difficult, require logical thinking, complex and comprehensive compared to the shool exams. An important part of the teachers stated that the teachers who participated in the TIMSS applications can not be prepared adequately to the TIMMS. Beside this, most of the teachers participated in Timms applications reported that the problems in Timms were different from the exams at school by the way of hypotesis and results. It was reported that 65% of the students joind to the Timms exam in 2011 did not prepared fort the Timms exam adequately. Moving from this point it is able to said that a significant part of the students have more coscious about the timms exam and the major part of them have prepared to the timms applications more according to the past. Students approximately 29% have found the questions difficult when



they have solved the problems in TIMSS 2015. But approximately 40% of the participants stated that the difficulty was easier than they hoped.

Keywords: TIMMS, Descriptive analysis, Science education, Students and teachers' opinions, Case study.



The Effect Of Using Interactive Book In Mathematics Instruction On Achievement And Motivation

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With the development of rich multimedia support of hardware and software technologies and widespread use of touchscreen and mobile devices, a new form of e-books called interactive books have become popular particularly in educational settings. This study aims to investigate effects of interactive books that was developed for mathematics lesson on students' academic achievement and motivation. ARCS motivation model developed by Keller (1987) was used to design interactive books in order to increase users' attention and the instructional efficiency of these books. Keller and Suzuki (1988) produced the instructional strategies concerning each category and sub-dimensions of ARCS Model; thus, we made an effort to integrate those strategies into our interactive book. In this study, pre-test post-test control group experimental design was selected. While participants in control group attended their regular instruction, students in experimental group were exposed to interactive books designed by researchers on three units stated above besides their regular instruction. Participants of this study consist of 94 preparatory undergraduate students in the department of Computer Science Engineering in Faculty of Technology in Firat University during 2013-2014 Spring Semester. We have developed and conducted an achievement test consisted of 29 questions related to three selected units after reliability and validity analysis. We also used "Instructional Material Motivation Scale (IMMS)" which was developed by Keller (1987) as a second data collection tool. These tools were conducted on both experimental and control groups before and after the experiment. The data was analyzed by using independent sample t-test and one-way ANOVA. We found that interactive book which developed based on ARCS motivation model had significant effects on students' achievement and motivation. It is recommended that instructors from various fields particularly from Mathematics can support their instruction using interactive books designed based on ARCS model. Also, similar models can be tested as separately of combined to achieve the most effective form of interactive books.

Keyword: Interactive e-book, ARCS model, academic achievement, motivation, achievement



Rational Emotive Behavior Based On Academic Procrastination Prevention Training Programme Of Effectiveness

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The research is an experimental study which has experimental and control groups, and based on pre-test, post-test, monitoring test model. Research group consists of second and third grade students of Primary School Education and Psychological Counseling undergraduate programmes in Giresun University Faculty of Educational Sciences. The research group was formed among the students whose academic procrastination tendency is middle or high, by using academic procrastination scale. 60 students, whose academic procrastination tendencies are medium and high level, were identified. 24 students, who volunteered to participate to the study, were appointed randomly to the experimental and control groups. Academic procrastination scale was used to collect data. Scales were given to experiment and control groups as pre-test. A prevention of academic procrastination program which developed by the researcher based on Rational Emotive Behavioral Approach was applied to the experimental group. Control group was not given any training. After the training the of experiment group, post-test measurements were taken. And also 30 days after the experimental training, follow-up measurements were taken.

Data were analyzed using Analyzis of Nonparametric. In the result of the applied program, a significant difference was found in favor of experiment group in academic procrastination. The results were interpreted in the light of the literature considering effects of Rational Emotive Behavioral Approach on academic procrastination.

Keywords: Academic procrastination, rational emotive behavior therapy, university students, the training program



The Place Of Historical Places Located In Amasya Teaching Of History Topics In The Curriculum Of 6th And 7th Grade Social Studies Courses

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Today, in the context a constructivist approach to education, teaching of basic historical concepts, having the students bring in historical and critical thinking, using the evidence of history in the classroom, having acquisition of historical empathy in history teaching, using other teaching methods and strategies and using aptly historical sites and ruins in teaching are considered as the main cognitive ways to activate the history teaching. It is considered that modern teaching methods that also can be used to solve the problem with history teaching, local history studies, museums and teaching the lessons making educational trips to historical places are the leading main factors that make the history teaching effective and permanent (Dinc, 2009, p. 1427). It is known that using historical sites as a social teaching material within soscial studies lesson in teaching history subjects is important for having stidents gain many skills in the program and devoloping critical thinking, historical empathy, historical insight and analysis skills among the goals of this course. Due to the geographical location, suitable topographic conditions and its position on major trade routes between east and west, Amasya as an important settlement which pertain to Ancient anatolian civilisations, Roman, Seljuk and Ottoman periods inholds historical sites belonging to these civilizations. In this study teaching it is aimed that introducing the historical sites in Amasya which is an open air museum with its historical heritage and using these places as an effective instructional materials in the teaching of history topics of the 6th and 7th grade social studies secondary course considering the benefits of the use of historical sites in the history. In this study, it has tried to put forward the tours to historical sites and ruins in Amasya province and the contributions of these educational activities which will be held in these venues in the teaching of history course within the social studies course. In this study it has been demonstrated which historical sites located in Amasya province can be used as a teaching material and their benefits in teaching the unit acquisitions of secondary school social studies teaching social studies topics. This study is limited to historic topics taking place in the secondary school social studies syllabus. Since there was'nt directly the history topics in the the 5th grade social studies curriculum the 5th grade syllabus wasn't included in this study, the study is limited by the 6th and 7th grade syllabus. The study is limited to historical places which are open to the general public, within the Amasya boundaries and allowed collective trip (paid or unpaid). Since there was no social studies lessons in the eighth grade in secondary school, the eighth grade wasn't included in the study. The population of study was determined as historic places located in the Amasya province. The study sample consists of the historical places chosen from among these histroical places by expedient sampling. Screening model of the qualitative research was applied in this study. Concerning the use of historical places in history teaching, the articles, papers and book chapters published in Turkey and abroad have examined to a certain extent to be reached. Examined about secondary school programs, history subjects taking place in the secondary school social studies curriculum were determined. Making the literature reviews on the subject, the studies in this area were examined and the importance of



the historical sites in history teaching are described. Finally the recommendations on which historical sites could be used in amasya have made for teaching of related acquisitions of history units taking place in the secondary school social studies syllabus.

Keyword: Teaching Social Studies, Teaching History, Amasya, Historical Places, Social Studies



Metaphors Of Pre-School Teacher Candidates And Pre-School Teachers About The Concept Of Play And Toy

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It has been well-known that play and toys have important roles on children's cognitive, emotional, social, and physical development. Plays and toys support child's development in all aspects. This view is widely held in both scientific and media publications. The relationship between the children's social development and plays and toys is viewed in two major domains: 1) prosocial or aggressive behavior; 2) the development of sexual roles. In the first of these, the influence of war toys and aggressive games on the social behavior of children is among the subject attracting most curiosity (Onur & the others, 1997). Play and toy along with the basic needs of nutrition, health, shelter and education, are vital to develop the potential of all children. Play and toy which have been a part of the desire for organizing and supervising individual's behaviour since childhood have been turned into an industrial commodity over time. Time and place which have been related to the fiction of play and toy have been reorganized with the effect of this industrial structure.

Play is communication and expression, combining thought and action; it gives satisfaction and a feeling of achievement. It is instinctive, voluntary, and spontaneous and helps children develop physically, mentally, emotionally and socially. Play is a means of learning to live, not a mere passing of time. Play is part of education. As a matter of course toy is a material which is designed for nurturing creativity in preschool aged children as a part of educational gains. They provide opportunities for initiative, interaction, creativity and socialization through play and toy in formal education systems and include studies of the importance of play and the means of play provision in the training of all professionals working with and for children.

From birth to age three play encourages self-reliance and helps children problem solve and learn about the physical world and how it works, from ages three to five, children learn through play by pretending with materials and practicing language. Play also helps build relationships between a child and his parents, caregivers and teachers. During play, adults have the chance to observe a child's perceptions and feelings and how he understands the world. The purpose of the study aim of this research is to determine the impressions and images of preschool teachers and teacher can-didates about "play" and "toy". The aim of this study is finding out, with the metaphor technique, the impressions and images of preschool teachers and candidates about "play" and "toy". The study group consists of 100 preschool teacher candidate who study in Preschool Education Program in Ahi Evran University and 100 preschool teachers who work in centre of Ankara, Aydın and Kırşehir during 2014-2015 academic years. The data obtained were analyzed in accord with the qualitative research model "phenomenology". Findings and Results The data analyzed made up 12 categories reflecting the images of the teachers regarding "play" and 9 categories about "toy". The most commonly used metaphor for "play" is "the power of child's creativeness". The most commonly used metaphor for "toy" is "a basic and essential material for child development"

Keyword: Preschool teacher, preschool teacher candidate, metaphors, play, toy



The Usage of Social Media for Distance Education: A Case Study for Sam Houston State and Firat Universities

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The tools used in educational technology has grown rapidly. Thanks to increase on Internet speed, its widely availability, and massive usage of smart phones, distance education can be conducted on different media in anyplace.

The number of instructors and teachers who use platforms such as Blackboard (WebCT), Schoology, Skype, Google+ Hangout, and Facebook for distance education have increased rapidly. Especially, online education on social networks have spread worldwide.

In this study, Blackboard platform used in Global Disaster Politics and Program Evaluation distance education courses at Sam Houston State University will be discussed. Examples will be given about usage of Google+ Hangout for online courses and its advantages and disadvantages are analyzed. In addition, Socrative software that is used for online exams at the Graduate Study at Software Engineering Department of First University will be introduced. Finally, some recommendations will be offered based on our observations on these applications.

Keywords: Distance Education, Social networks, Blackboard, Schoology, Google+ Hangout, Socrative



Pre-Service Physical Education Students' Perceptions About Web 2.0

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While the increasing use of the Web 2.0 technologies (e.g. text messaging, wikis, personal web pages, social networks) and applications in many areas of education are important, still teacher candidates from specific subject matters, such as physical education, appear unaware of significant potential benefits of such tools in their teaching and learning environment. The purpose of the study was to assess pre-service teachers' perceptions about Web 2.0 technologies and to increase the awareness of the benefits of this technology among students in the department of physical education in DokuzEylul University. In this context, the descriptive survey method was used and a questionnaire was applied to 78 pre-service students (52 male and 22 female) enrolled in physical education department. Date was gathered a survey including open-ended questions (n=78) and semi-structured interviews (n=9) after one semester of the course including weekly web 2.0 activities based on the lesson topic. Result of the study suggest that even most of the students had a very negative perspectives about Web 2.0 tools at the first meeting of the lesson, at the end of the semester they had very positive feelings about use of this technology based on their belief about the potential of these tools for enhancing their and also their students' learning.

Keyword: Web 2.0, physical education, technology integration, perceptions



Byzantine Empire Place in The Secondary School Social Studies Textbook and High School History Textbooks: After and Before Constructivism

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The history in the social studies is one of the essential disciplines dealing with the man and his activities regarded as scientific. Very important tasks fall to the teaching of history at the point of transfering material and epistemological accumulation and continuity in the our history of human civilization to the new generation. That starting with parents at informal level, the informations regarding the discipline of history meet the students is supplied by multidisciplinary Life Science / Social Studies classes in primary and secondary school age at formal level while at high school level, it is performed through the course of history in a single discipline.

In the classical sense, it can be said that ,for states, the importance of history education are shaped by the development, security and continuity needs in the region established. For this purpose in order to educate the ideal type of citizen whom the states imagine, they benefit from educational institutions which is leading the regime's ideological means. The educational programs and textbooks whose content created by many disciplines formed as a result of the needs of the states. in the curriculum of social studies and history courses, the history subjects and history lessons in the secondary school social sciences course have an important role at the point of accomplishing history teaching objectives pronounced as awareness of cultural heritage, ability of analysis the interaction between cultures, ability of establishment the relationship between cultures, the ability of understanding the change and continuity. It can be said that social studies and history textbooks almost serves as a key task to accomplish this purpose briefly discussed above.

Ottoman dynasty laying the foundation of a state to rule for six centuries including before Republic and after the Seljuks of the Turkish history, has become a huge empire spanning three continents after 216 years from the establishment. It is essential to seek the cause of Ottomans' domination in such an enormous geography in a short time in the geopolitical situation in the region they established, the mind of jihad in islam and the housing policy on the basis of economic factors. As a result of this spreading Ottoman politically, socially and economically interact with many empires, states and various religious and ethnic communities. the Eastern Roman Empire which have the most deep-rooted state tradition of Asya minor and institutions, the Byzantine Empire commonly known in academic community, is leading political formations with which were interacted especially during the establishment period. After the conquest of Istanbul in 1453, that Mehmed had himself titled Qayser-i Rûm (Kaiser of Rome) or "Roman Caesar" is an important anecdote to comprehend the extents of this interaction. Considered from this point, since Social Studies and History in our country achieve their education goal, informations about Byzantine Empire have



importance with regard to identification of external influences in shaping Ottoman political institutions and cultural structure.

In this study, as the target population of the study, the secondary school social studies textbook and high school history textbooks taught in before and after period of constructivism were chosen. Since it is often preferred in various studies carried out on textbooks, the content analysis method which is one of the qualitative research methods was used. As it is associated with history, model of this research was selected as the literature review .

It tried to analyze how many places is dedicated to the Byzantine Empire, what information they contain, the quality of the information and discourse used in transmission in selected textbooks. Furthermore it aimed to reveal the positive and negative aspects of that the relevant textbooks make headway to Introduce Byzantine Empire comparing textbook contents arranged according to old and new curriculum during ten-year period after constructivist education system adopted in 2005.

Keywords: Social Studies Education, History Education, Middle School Social Studies, School of History Courses, Textbooks, the Byzantine Empire



Opinions Of Geography And Social Studies Teachers About The Use Of Geographic Information Systems (The Sinop Case)

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Many innovations have been seen in the world of education. As a result of these innovations perspectives on students have changed. Now inquiring, investigating, and questioning individuals are grown. Of course information and communication technologies are a great contribution to this situation. As the components of information and communication technologies, Geographic Information Technologies (GIS) consists of staff, methodologies, software and hardware. GIS is widely used in many studies in the educational environment. As well as providing various educational environments suitable to both individual and group learning techniques, GIS also helps receiving personal feedback.

This study was performed for determining the opinions of Geography and Social Studies teachers towards GIS using, who are working in various schools affiliated to the ministry of education. The study was conducted as a result of obtaining opinions of teachers regarding the use of GIS through questionnaire after theoretical and applied GIS education carried out within the scientific project carried out by Sinop University (Children Education Research and Application Center). It was tried to determine the benefits of the GIS in the classroom activities, teachers' opinions about theoretical and applied courses and activities carried out within the project, the limitations experienced in learning and the use of GIS. According to the results of the research, some issues were determined such as; GIS provides a huge support in classroom activities, the need for expansion of activities and programs related to GIS, teachers being not widely using Geographic Information Systems in courses; unavailability of GIS usage in the schools; lack of adequate technological infrastructure, the update problems of the software used, lack of adequate support from the school administration in this issue and so on.

Keywords: Geographical Information Systems, Teacher Education, Geography Education



An Investigation And Evaluation Of Science Centres Websites In Turkey

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Today education activities have become a lifelong process which uses all the resources not only in schools but also in the environment. These resources which promote education in schools and are called informal education environments include many social fields. Some of them area are zoos, botanical gardens, museums, libraries, aquariums, planetariums, factories, natural monuments, and science centers. These places which are called non-school environments offer students experiential learning opportunities, give them chance to use their five senses, and provide opportunities for their permanent learning. One of the informal learning environments which contain many fields is science centers. Science centers are interactive places which enable visitors to learn with fun and also demonstrate them which phases technologies developed by the human beings went through and became the ones that we use today. Science centers provide learning opportunities for increasing population outside the school and they also make contributions to their visitors to explore freely, learn by themselves, and share their experiences via interacting and communicating with groups. Science centres which have a considerable importance and functions in developed countries are intended to be popularized in our country. At this point considering the fact that the first contact between science centres and visitors is usually provided with websites, it is quite important that the content of these websites should be designed and developed to meet the needs of the visitors. When the prominent and institutionalized science centres in the world like Deutsches Museum in Germany, London Science Museum in England, The Exploratorium in the USA, and The Ontario Science Centre in Canada are examined in literature, it is found that they present many information, visuals, and documents on their websites which will address the needs of the visitors. From this point of view, the aim of this study is to reveal at what level the websites of existing science centres in Turkey meet the needs of the visitors after analysing the websites. The study was carried out with descriptive scanning method and between September 14 and September 18, 2015 the key word "science centre" was searched on Google. As a result of Google search, twelve science centres were found and they were included in the study. During the process of analysis of the documents obtained, two researchers examined every single data on the website separately and then they combined and tabulated them. Within this context, four main titles were obtained: current news, education and activities, visuals and appointment-reservation. As a result of the research study, it was found that all of the science centres published their contact address, work and visiting hours and they also gave information about the organizations like various summer camps, summer schools, festivals and festive on their websites. Moreover, it was revealed that there were links for appointment, reservation, and registration on the websites of 11 science centres and the websites included pictures and photographs about the content of the science centres. Another finding of the study is that only two science centres published their education programs and five science centres published the content of the training given on their websites.



Key words: Science Centre, Website, Informal Learning, Science Teaching.

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Evaluation (need, objectives and content) of Primary 5th -8th Grade Physical Education Curriculums

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Neriman ATASEVEN

In contemporary societies, it is focused on the need for individuals' physical development besides their cognitive development to raise them in many aspects as a whole (Aras, 2013). In this context, it can be said that physical education has an important place in general education. Because, physical education helps students' development of cognitive, emotional, social and psychological (Akdoğan, 2009) besides their development of physical and anatomical with formation of muscular, skeletal and diarthroses (Aracı, 2000).

With reference to this, it is aimed to help individuals' growth and development, make sport their parts of lives and make them comprehend cultural aspects of sport (MEB, 2015). To realize these aims, it needs qualified teachers, efficient students, necessary equipment and effective curriculum.

Curriculum which is one of the cornerstones of education should be constantly developed to maintain the its functionality. To do this, curriculum evaluation, "which is a process including data collection about effectiveness of curriculum, compare data obtained with curriculum criteria and interpret and decide about effectivity it" (Erden, 1998: 10) should be carried out. Evaluation of the curriculum gives important information about success of the curriculum and it can be more effective with a redevelopment process. So, it is necessary that deficiencies that exist in curriculum should be reviewed and evaluate to maintain functionality of physical education curriculum which is important for students' multilateral development. Based on this requirement, there are many studies that evaluate physical education curriculum. In these studies, physical education curriculums in preschool (Altınkök, 2006), primary (Arslan, 2008) and secondary (Bilgin, 2007) are evaluated. In most of the studies, evaluation is done with teachers' view (Kalemoğlu, 2011); but in some students' view (Aras, 2013) is used. In these studies, it is indicated that curriculum should be evaluated and redeveloped; experts and practitioners should be included to the process and teachers should be informed about the curriculum. While examining these studies, it is seen that there is no study which evaluate the curriculums by investigating each components of curriculum inclusively. So, this study is expected to meet this requirement. Furthermore, this study helps curriculum developers in curriculum development process. Aim of this study is to evaluate 5th -8th physical education curriculums. In accordance with this general aim, eligibility levels of the curriculum for "the needs and theoretical aspects", "objectives", "content" criteria were examined. Document analysis from qualitative research method was used in the study. Rubric for Curriculum Evaluation (RCE) was used to evaluate the curriculums. Curriculums are examined independently by 3 PhD students in accordance with the criteria in RCE. Criteria in RCE were rated by experts and an evaluation is made by using the average of the scores that 3 experts give for the same items. Furthermore, gap width of criteria rated between 1 and 5 is calculated



According to research findings, it is seen that needs and theoretical aspects dimension of 5th-8th grade physical education curriculum is appropriate to the extent of the need and theoretical aspects in a moderate level (X=2.76); objectives are appropriate to the extent of objectives in a high level (X=4.50) and content dimension of curriculum is appropriate to the extent of content (X=3.65).

According to result of the evaluation, it is seen that needs and theoretical aspects dimension of 5th-8th grade physical education curriculum is appropriate to the extent of the need and theoretical aspects in a moderate level. It can be said that determining needs process which is a guide for analyzing and determining needs of individual, culture and society and determining objectives, content and learning activities (Taba, 1962) is unsatisfactory. It is also found that objectives are appropriate to the extent of objectives in a high level. Based on this result, it can be said that objectives of physical education curriculum is appropriate to objective criteria of an efficient curriculum. It is seen in the study that content dimension of curriculum is appropriate to the extent of content and content of the curriculums is in a harmony with objectives of the curriculums. It can be said that it is a positive result; because content should be determined limited according to objectives (Sönmez, 2010).

Key Words: Physical education, curriculum, curriculum evaluation, secondary education



Implication of Trait Anger and Anger Expression Styles Scale in a New Modelling between University Students from Various Social and Cultural Environment

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The purpose of this study is to investigate anger attidue differences of university students and teacher candidates studying in various social and cultural regions by modelling anger and anger expression style scale according to some variables such as age, gender, education level, number of siblings, parents' education level. The study population consists of a total of 551 students including from Batman University(263) and Pamukkale University in the academic year of 2014-2015. Demographic characteristics and trait anger-anger expression style scale were employed as measurement tools in data collection. In order to test whether the structure of TAAESS, defined as 4 factors, verified in predetermined participation group, Confirmatory Factor Anaylsis (CFA) was conducted using LISREL program. After TAAESS Validity and Reliability Study was carried out, first level4 factor Robust ML model was developed in Reliability study. Result of this study showed that defined 4 factors of scale can bring out more consistent results even with 30 items as well. Differences in anger subscales includingtrait anger, angerin, angerout, angercontrollevel differences were found statistically meaningful. It can be proposed that the origin of these differences probably came from their different social and cultural environment. Among suggestions that will provide contributions for professionalization of university students, future educators, against anger, it is proposed that model of 4 factor Robust ML with 30 items should be employed in researches by increasing social and cultural activities, raising awareness of society against anger and utilizing TAAESS.

Key Words: Anger attidues, Education, Robust ML Model



The Effects of a Digital Timeline Material Prepared for History Course on 8th Grade Students' Academic Success

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The teaching of history is one of the most important disciplines in the social sciences. It is difficult to create a clear and concise understanding in the students minds with the teacher-centered instructional methods (usually lecturing) used in our educational institutions. We are using abstract teaching methods to communicate about historical times that have no clear connection to the students' everyday life. Because it does not appear relevant to the modern ages, many students react in an undesirable fashion to the course material. In this context, to be able educate socially conscious and qualified individuals, we need to use technology to enrich educational medias and materials that address diffferent senses of the students.

The aim of this study is to investigate of the effects on academic success of a digital timeline prepared for the history course with www.tiki-toki.com for 8th grade secondary school students. In the material, the following units of the official history course book prepared by the National Education Ministery were handled: "Bir Kahraman Doğuyor" (A Hero is Borning), "Ya İstiklal Ya Ölüm" (Either Freedom Or Death), "Milli Uyanış" (National Awakening), "Yurdumuzun İşgaline Tepkiler" (The Reactions about the Invasion of Our Land) and "Çağdaş Türkiye Yolunda" (On the Way of Contemporary Turkey). This study was conducted on 57 students, who were attending Bahçelievler Secondary School in Elazığ in 2014-2015 Fall Term. The study was based on pre-post test with control group method. In the experimental group, the digital timeline created with tiki-toki.com was used to support the instruction. And in the control group the interaction was face to face with lecture method. An achievement test developed by the teacher of the course was used as an assessment tool in the study.

According to the results obtained from the study, the post-test scores of the experimental group who were taught with digital timeline scored higher points than the control group who were taught by face to face lecturing. At the end of the study it was concluded that the digital timeline material, which was developed for History instruction for 8th grade students, has a positive effect on the academic success due to addressing different senses of the students.

Key Words: online education; digital material; material design; history education; tiki-toki; timeline



Institutional Motives for Distance Education Centers in Turkey

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Today, increasingly many universities throughout the world have started to involve in distance education. As technological advancement has brought new opportunities, a growth in practice of online and distance education has been reflected in many countries around the world. The review underlined that the popularity of distance education in universities in Turkey developed and the growing interest in online learning and teaching enabled universities launch new distance education centers in Turkey. Although the number of online academic degree programs offered by universities in Turkey has become increasingly significant in recent years, the current lack of understanding of administrators' motives that contribute to initiating these programs suggests there is much to be learned in this field. This study aimed to investigate administrators' perceptions of motives for offering online academic degree programs in universities in Turkey. The qualitative research method was employed for this study. Document analysis and interviews were used to collect data. The research found that administrators' motives for offering online academic degree programs mainly involve in answering to the high demand of prospective students. Considering the results of the study, it is highly recommended that policy makers and program leaders structure online academic degree programs in accordance with the academic expectations definitely delineated through the country's educational goals, rather than prospective students' demands and under the influence of popular online programs.

Keywords: Distance Education Centers, Online Academic Degree Programs, Administrators, Institutional Motives



Students' Opinions Related With The Concept S Which Take Place In The Third Grade Science Programme (Power, Matter, Light And Sound)

Şerif Ali DEĞİRMENÇAY Yusuf İslam ŞAHİN

The aim of this study is to contribute the teaching of Science Programme which will be started to practise in the third grade class .Intended for this aim , a test consists of 12 questions was developed in order to identify the difficulties in understanding and concept paralogism related with the topics 'Let's Know The Power , Let's Know The Matter and Lights and Sounds in Our Environments'.The developed test was practised on thirty third grade students in a primary school in Ünye which is the district of the province , Ordu .Also with the eight choosen students, semi-structured interviews were carried out .Obtained findings were evaluated and interpreted on charts. According to the findings ontained from tests and interviews , it was found that third grade students had many difficulties in understanding and concept paralogism related with the topics such as 'Power ,Matter ,Light and Sound'.

Key Words: Science Lesson ,Power ,Matter ,Sound and Concept Paralogism .



Parents' And English Language Teachers' Views About Early Foreign Language Education In Turkey

Dilek ÇAKICI

In this study, early foreign language teaching was examined. It was aimed to investigate the views of parents and English language teachers of primary school students about the optimal age for foreign language, deficiencies in the early foreign language education in Turkey and their expectations in order to describe the present situation of early foreign language education. Teacher's questionnaire and parents' questionnaire, which were created by Kuru Atadere (2012), were used for the research. The questionnaire for English language teachers consists of 31 questions, whereas the questionnaire for parents consists of 24 questions. In both of the questionnaires, close-ended questions were used to check attendants' demographic characteristics. In order to take their individual opinions about early foreign language education, open-ended questions were used. Furthermore, multiple choice questions and the questions including checkboxes were used to see to which of the given situations attendants feel themselves closer. The questionnaires were administered to primary school English language teachers and to the primary school students' parents. 20 teachers and 30 parents attended the research.

The results revealed that both parents and English language teachers have positive views towards learning a foreign language at an early age. They found early foreign language education beneficial for children.

Keyword: Early foreign language, parents, English language teachers



Using Active Method Applications in Teaching and Learning Mathematics

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The students who begin to learn mathematics at university with prejudice of mathematics is boring, difficult abstract and students don't like this subject. Then those students change their thought because of their teachers or them like mathematics. They think that they can't succeed the mathematics. The methods of teaching mathematics are important for changing their thoughts and destroying their prejudice.

We applied a creative drama, one of active learning methods in our studies at schools of occupation "sequences, central tendency, what is means 0 or 1 in computers, the duties of keyboard shortcuts".

The students can join the education with games and they can use their creativeness, by using the creative drama methods in teaching mathematics.

We share the applications in this study.

Key words: Creative drama, teaching mathematics, mathematics at occupation schools, creative drama at teaching mathematics.



Identified Challenges Of Teaching Objective Sciences In An Environmentally Directed Way

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The world is experiencing drastic deterioration of the state of the environment. Many countries have since realised that and are taking serious action to curb it. Signed protocols such as the Kyoto protocol, unending international conferences where environmental matters top the agenda attest to that. Attempts are also made in many countries to build environmental components in the curricula with the aim of ensuring that learners become more environmentally literate. However, these are often met with challenges.

This paper wishes to identify challenges of teaching objective sciences to learners in an environmentally directed way as part of continuing towards effective teaching and meaningful learning in teacher education in South Africa. Focus is also made on efforts to improve on these challenges

Key terms: challenges; curriculum; teaching; learning; teaching in environmentally directed way; South Africa.



Investigating the effects of blended learning on organizational performance: A banking case study

Ali Shayan Monireh sadat dastkar Davood Karimzadgan-Moghaddam

Nowadays, new information technologies have influenced educational system. A new method called "blended learning" is considered as a response to the traditional or virtual learning programs. Experts and researchers found it useful in many real world cases. Using blended means combining virtual teaching (electronic teaching) with other methods. This study investigates the effects of using this method on optimizing organizational performance in Iranian companies (Mellat Bank case study). The study is an applied and descriptive survey. Statistical population in this case is 400 employees of Mellat Bank chosen randomly and correlation among hypothesis investigated. The results show that there are different relations among variables of online learning, face to face learning and blended learning due to performance promotion at Mellat Bank. The results show the importance of blended learning in promotion of different aspects of organizational performance.

Key words: blended learning, organizational performance, Mellat Bank, Virtual learning



The Effects Of Elective Course "Science Applications" On Science Lesson; A Qualitative Study With $6^{\rm th}$ Grade Students

Pınar URAL KELEŞ Süleyman AYDIN Ayşegül ÖNER

The aim of this study is to identify opinions of 6th grade students with regard to the effects of elective course science applications on science lesson. The sample of the study was composed of 6th grade 15 students who are voluntarily attended the study of a secondary school which opened "science applications" lecture in spring season of 2013-2014 educational year in Agri province. The data of the study in which case study method was used, was collected through semi-structured interviews. The data obtained from the interviews was subjected to descriptive and content analysis. As a result of the study, it was identified that the students liked the lecture a lot and thanks to this lecture they understood the science lesseon and other lectures better and they would like to take this lecture next year. Besides, it was also identified that the period dedicated to this lecture was also used sometimes for test solving or making up the deficiency of science lectures.

Key words: Elective science applications course, Science education, Students' opinions.



The Evolution of Grammar Teaching

Dönercan DÖNÜK

English language teaching has witnessed various fashions of teaching throughout the last three decades. This change can be observed through the curricula, language teaching methodology, and accompanying material. The way grammar is dealt with from the perspective of each methodology is worthy of examination, for the grammar works as the backbone of each language. This retrospective study aims to throw light upon the issue of grammar embodied in each method or approach, by tracing back to its usage in the coursebooks of the time. Additionally, the descriptive research has been designed to make implications for the inductive and deductive approaches to grammar teaching on micro and macro scales; namely, at the national and international levels.

Key Words: Grammar Teaching- History - Evolution- Inductive Teaching/Deductive Teaching- Grammar- Approaches and Methods



Usage of Mobile Interactive Technology to Support Formative Assessment As Feedback And Learning Tool

Özkan Yılmaz

In Higher Education, an important aspect of the teacher's role is providing timely feedback to student. This can be considered as an instance of formative assessment in learning environment. Formative assessment involves the teacher get knowledge about the students' learning in order to improve the instructions and learning. The term "formative assessment" is not new but is now being used in interactive teaching. This paper explores the interactive teaching in relation to the interactive technology which is support formative assessment in learning environment. Methods are suggested for embedding formative assessment as feedback and learning tool. Higher Education Students used mobile interactive technology with teacher, in a term, in physic course. Qualitative research design was used in this research. Focus group interview method was used to get data collecting. Operational aspects of mobile interactive technology would be summarized and students' perceptions and satisfaction with use of this teaching and learning technology would be described.

Keywords: Interactive technology, Mobile technology, formative assessment, feedback



A Perspective to Examine Learning Environments: Discourse Analysis

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Establishing learning environments that both engage students and improve learning is one of the main goals of social constructivist approaches. One common tool to measure the effectiveness of these environments is the analysis of discourse and/or language. Discourse might reveal important implications about both language and content learning. From a social constructivist perspective, language is regarded as a tool for teaching-and-learning, constructing knowledge, creating joint understanding and tackling problems collaboratively. In this chapter, referring to previous work on classroom discourse and language learning and/or teaching, we will discuss the significance of the analysis of teacher questions, teacher uptake, student questions, codeswitch and general structure of discourse. Excerpts from the classroom discourse will be discussed to reveal some pedagogical implications.

Keyword: Classroom discourse, discourse analysis, language education, foreign language teaching



Science And Technology Teachers' Views With Regard To Gems (Great Explorations In Math And Science) Applications

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GEMS (Great Explorations in Math and Science) program developed by the Lawrence Hall of Science, University of California is a flexible and qualified education program which brings fun and interesting math and science activities into classes. On the other hand, it is interesting to note that GEMS is a very new concept and there is a limited number of studies on this issue. Thus, it is considered that the current study will contribute to the literature.

The aim of this study is to determine the views of science and technology teachers with regard to GEMS applications. In the study, phenomenology, which is one of the qualitative research paradigms, has been used. The sample of the study is composed of eight (5 females and 3 males) teachers who took part in project titled "Gems Based Innovative Instruction Applications" supported by TUBITAK within the framework of 4005 Science and Community Innovative Instruction Applications.

The aim of the project is to make teachers actively experience GEMS program by taking place in GEMS activities in the role of student. This process envisages that teachers will grasp the basic philosophy and application processes by experiencing themselves. The Project was carried out with 24 class teachers and 23science-technology teachers. With the scope of the Project, during the first four days of the 5 day application process each group was given 5 modules which takes one day and composed of 4 to 8 sequential activities. Some of these modules include ready-made activities which have been developed directly using the GEMS program, some include activities adapted from other sources and developed by the project team observing the characteristics of GEMS approach. On the 5th day, participants worked in groups to develop their own modules. Semi-structured interview from was used to collect data for the study. In this form, includes questions about the teachers' metaphors about the concept of GEMS, GEMS applications and their views with regard to the applicability of these application and their suggestions for the development of GEMS applications. Data obtained from the interview was coded using NVIVO 9.0 software. According to the analysis of interview, it has been revealed that teachers think that it has positive characteristic like being process-focused, fun, real-life like, planned, adopting multidisciplinary approach, arousing interest and encouraging active participation but they also think that it is difficult to apply GEMS applications in the current education system because of the intensity of curriculum, exam anxiety, parents pressures, classroom management problems and of time-taking and complex activities.



Keywords: GEMS (Great Explorations in Math and Science), science and technology teachers, views



Recent Developments in the Analysis of Human Action

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Analysis of human action has an important place on the computer vision area. One of the most important reason for today is the increased use of cameras. This use comes across in many places such as automated surveillance systems, airports, subway stations, patient monitoring places and nursing homes. The purpose of video analysis is to identify suspicious and abnormal movements in most of these use areas. Thanks to this identification, precaution may be taken and many crimes can be prevented. Human activity analysis requires an automated recognition. These activities may be low-level actions or high-level activity which is the combination of a few simple movements. The purpose of this paper is to share the recent developments that have been put forward in the action analysis. Public datasets is used for action analyses in this paper. Actions are separated into classes based on specific properties during action analysis. According to the classification, recognition is performed with different techniques. Numerous techniques have been developed for recognition. Positive and negative aspects of the techniques are also given for certain classes. We discussed techniques that have recent developments in this paper. It is thought that these results will be encouraging and specimen for future research.

Keywords: human action recognition, video analysis, computer vision, survey



Teaching Programming Via Web Conferencing: An Evaluation Using Seven Dimensions of E-Learning

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Comparing to the traditional instructional methods, delivering the courses in the online learning environments requires more different and dense preparation.. In online environments, students mostly have to work independently despite their cooperation through the synchronous applications. Therefore,, instructors should apply convenient teaching strategies in order to present the topics to meet learners needs. So, in order to provide individualized environment, more student controlled learning environments are suggested. On the other hand; in online learning field, one of the most demanded course is s Programming Languages. Programming Languages is one of the problematic course for the learners due to its complicated mental processes. However, it is stated that teaching the programming logic in online environments through traditional methods was somewhat boring and ineffective for the students. In this regard establishing learning environments which gives the control of the content to the students. may contribute to student-content interaction and may facilitate the mental processes in understanding programming concepts.

Every step from design to the delivery of the course; in making the courses achieve their objectives should be organized within a quality plan. At this point, when the basic theories of online learning are analyzed; it is seen that the online teaching consists of objectives, content, student, teacher and interactions which are originally also can be found in the traditional methods which show them only in various forms. In this regard; Elaboration Theory (ET) has some authentic strategies for the occasions of theories related to online learning environments through the elements it includes. ET significantly combines numerous consistent strategies at the point of organizing the content of the course consecutively. Arranging the content of the course is significant from the point of students that they are to control the content during the applications. So this type of content organization may help keeping the interest and motivation of the students high level. Therefore, the design of content is quality of delivery. Some studies were conducted in order to reveal the elements in performing the effective teaching in Online learning environments within the scope of basic Online learning theories. One of the most important studies is on assessing the online environments is put forward byZaharias and Poylymenakou (2009). Zaharias and Poylymenakou (2009) highlighted seven dimensions of E-learning such as Content, Learning and Support, Guiding, Accessibility, Interaction, Self-evaluation and Learnability. Those dimensions were suggested to use in determining the components effecting on quality of online learning environments. According



to the context of applications and technologies in the system of web-conference (Adobe Connect) used in this study may be analyzed under the headings determined by Zaharias and Poylymenakou (2009). The elements of the ET are utilized in delivery of the course contents and arranging them. The instructional process within ET was evaluated from the points of the dimensions of E-learning presented by Zaharias and Poylymenakou (2009). ET presents principles about the role of the instructor and the student in the process and the order of the content.

In the research, the course was designed and delivered taking ET the course of Programming Languages in online environment as a reference. Instructor applied the strategies of ET by using the instructional software prepared using the principles of this theory in the presentation of the course. Accordingly, the purpose of this research is to analyze the effectiveness of programming education performed within the frame of ET in the online environment according to the dimensions of E-learning.

The research was conducted for 6 weeks with 30 students enrolled in Education Faculty Computer and Instructional Technologies department. During the lessons one of the researcher took, observation notes. Finally, 5 volunteered students were interviewed. At the end of the course period all the students filled the assessment form prepared in accordance with the dimensions of E-learning to evaluate the instructional process. In conclusion;

It was found that the Programming course designed within the framework of ET that,

- The content of the course was attractive and easily understandable according to Content and Visual Designing and the instructional software was well-matched and had a rich content;
- Various course activities were organized for active participation of the students to the instructional process according to Learning and Support;
- The students encountered no problems in accessing the system since the instructors played a supporting role from the point of Guiding and Accessibility;
- The students encountered no problems in using the instructional software and the system and had opportunity to evaluate themselves according to Evaluation and Accessibility. Providing some suggestions due to the evaluation; it is hoped that; the study can be an example for designing and evaluating the instructional process through web conference systems in online environments.

Keywords: Online Learning, Programming Course, E-Learning, Elaboration Theory



The Investigation Of Technological Pedagogical And Content Knowledge (Tpack) Self-Efficacy Perceptions Of Secondary School Teachers': A Sample Of Amasya Province

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The main theme of this study is the technological pedagogical and content knowledge (TPACK). The well-known terms such as pedagogical technology information (Guerrero, 2005), pedagogical content information of technology (Margerum-Leys & Marx, 2002), techno-pedagogic skills (Beaudin & Hadden, 2004), pedagogical content information (Angeli & Valanides, 2005) and technological pedagogical content knowledge (Niess, 2005) which are related to information and communication technology refers to the same meaning with the term TPACK (Mishra & Koehler, 2006).

Technology has affected the education field together with many other fields inevitably in 21th century. Technology has provided great benefit for teaching, management, and guidance. The use of technology in the field of education is to be sustainable and is to be extended. Teachers are expected to be qualified enough for technology, pedagogy, and content knowledge and it's inevitable for them to use these qualifications efficiently in their academic life because of the necessities mentioned above.

Secondary school teachers' success to train their students is directly proportionate to their using technology during their lectures. At the same time, self-efficacy use of technology in academic life increases as long as the schools provide many more technological tools for teachers and students. Qualified teaching of secondary school teachers is just possible with successful teachers. In this case, teachers are to integrate technology in their courses to make students gain experience aside using it individually. Technology is indispensable in modern times. Secondary school teachers should have both the technological competence and also have the competences such as managing a course by using technology actively during lecture, evaluating with technology, using student centered strategies while using technology in class and uniting technology with curriculum.

The purpose of this study is to investigate the secondary school teachers' self-efficacy perceptions about TPACK. For the purpose, the Technological Pedagogical and Content Knowledge model and components will be used.

Survey method was used in this study. The participants of this study, in which the survey model was used, are secondary school teachers working in Amasya city center. The TPACK instrument developed by the Öztürk & Horzum was used to obtain the data. The quantitative analysis of the study will be done using the PASW Statistics 18 program. In the analysis, t-test and ANOVA were used besides frequency, percentage and mean.



With this research, it was founded that teachers' perceptions for sub-dimensions of TPACK shows differences and also these perceptions show differences according to some variables.

 $\begin{tabular}{ll} \textbf{Keywords}: Technological literacy; technological pedagogical and content knowledge (TPACK); secondary school teachers; self-efficacy perceptions \end{tabular}$



Development Instructional Module For Gifted Children's Parent : Parent's Involvement Level

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Parent participation in the education of gifted children is very important. Parent participation to educational process of the students is continued socio-emotional development of these children and provided effective educational opportunities. In this study, it is focused gifted children's parent involvement. The purpose of this study is to investigate whether the implementation of instruction module in gifted's parent has any effect on parental involvement and whether thise variable differed with gender, the number of child and monthly income. It is seen that while in some countries studies are available towards the families of the gifted children; in our country studies are restricted in this topic. With this study, determine involvement level of families to the process of gifted children's education. Within this context, the problem of the study is "whether whether the implementation of instruction module in gifted's parent has any effect on parental involvement or not". In addition, sub-problems of this study are as following:

- 1. Is there a significant difference between the parent involvement level pretest score averages of the parents in the experimental group and the control group?
- 2. Is there a significant difference between the the parent involvement pretest scores and posttest scores of the parents in the experimental group?
- 3. Is there a significant difference between the parent involvement pretest scores and posttest scores of the parents in the control group?
- 4. Is there a significant difference between the the parent involvement posttest score averages of the parents in the experimental group and the control group?

In this study, quasi-experimental design with pretest-posttest control group which is one of the quantitative research methods is used. The sample consisted of 51 parents (24 mothers and 27 fathers) of gifted students who were living in Amasya city center in Turkey. Sample sellection is purpose sampling. 'Parental Involvement Scale' developed by Can (2009) was used to obtain data. The first sub-factor croanbach-α reliability coefficient was found 0.86 and the second was found 0.85 for Parental Involvement Scale (Can, 2009). There are two dimensions (parent-child interaction, parent-school interaction) in 'Parental Involvement Scale'. Low scores represent low participation. High scores represent high participation. Research permission was obtained from the relevant institutions. Data related parents was gathered during an BİLSEM activity. Parental Involvement Scale' was applied to the experimental and control group both before and after the experimental process. The obtained data will analyzed through independent and dependent sample t-test in SPSS program.

Keywords: parent involvement, gifted children's parent