



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

Programme & Summary Proceedings







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Academic discipline: Curriculum, teaching and learning
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Evaluation of Constructivist Learning Approach through Experimental Studies

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The dominant approach in education in 20th century which saw teachers as the primary source of information and only authority in class and expected students to learn by listening their teachers and do everything as he or she said has been replaced by the constructivist approach that places the students into the center of education, forms education depending on their needs and interests and gives students the opportunity to take responsibility in their own learning in 21st –namely Information Age- century. The curricula in Turkey also have been reformed according to constructivism since 2005 and are being continuously followed and modernized according to developments both in education and technology. Since then, many studies have been carried out in order to find out how to adapt this approach to classes, how students, teachers and all other direct and indirect participants of education will be affected and integrated in etc. Besides, as the main concern is to make students learn and let it happen by students' constructing the new knowledge on their prior information and experiences by themselves, experimental studies try to understand the process and find the best way to provide it for each school subject as all school subjects require different things from students but there is one common idea behind constructivism that students are unique and they should be given a chance to learn in their own way. It is important to overview such studies, analyze them and bring their results together is important in order to see the improvements in time, understand the difficulties that have been experienced, show their tendency, etc. The aim of this study is to provide some findings about tendencies, number of studies, study, data analysis and sampling methods etc. and summarize the results of the studies: i) which were published between 2005 when new curricula were introduced and 2016 (until March when data collection was done); ii) were published in a journal indexed in Ulusal Akademik Ağ ve Bilgi Merkezi (Ulakbim); iii) that consist one of the following keywords in its title: “constructivism”, “constructivist learning/teaching”, “constructive approach”, and iv) that employed experimental method. This study employs the descriptive method which aims to represent a situation as it is and documentary analysis will be used as data analysis method. A total of 37 studies that employed the experimental method, were published between 2006 and 2016 with one of the keywords in its title and could be reached in a journal indexed in Ulakbim will be used as the data source. These studies will be examined on many different aspects in order to find out tendencies and changes about constructive learning and teaching experiences and understand how effective they have been. The year with the most number of studies is 2009 with 6 studies and there are 5 studies in both 2011 and 2012. The samples used in these studies are from all grade levels. Studies examine the effect of some teaching



and learning theories and methods that are used in constructive approach and compare them with traditional teaching applications, especially through pre and post-test experimental design with a control group.

Keywords: Constructivism, experimental design, document analysis



Academic discipline: Curriculum, teaching and learning
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A Look at Constructivist Approach (Through Studies in Ulakbim)

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The curricula of all lessons in all grades in Turkey were reformed according to constructivist approach with a tremendous change in 2005. In order for adapting the 21st century requirement, the traditional approach in which the teacher is more active and dominant and information is transferred to students was meant to be replaced by constructivist approach in which students active and productive and information is explored by students themselves under the guidance of teachers and constructed within their minds. Various studies have been and are being carried out to find out what this new approach has brought and how effective or ineffective it has been. Though the idea behind this approach sounds perfect in terms of education, there are many elements effecting the results. The studies that try to answer the questions such as what teachers and school managements know and think about constructivism, how different the results of this approach in various school subjects, if schools and their environment are ready for it in terms of mental and physical conditions and changes which occur in time in these studies' methods and aims are important to see the tendency of constructive approach studies. In search of the effectiveness and validity of the approach, various evaluations have been made by collecting data from teachers, students, managers and all the other sharers. The aim of this study is to present the tendency of studies: i) carried out from 2005 to 2016 (until March), ii) consisting "constructivism", "constructive teaching" or "constructive approach" in its title, iii) employed survey method. Among the presented information there will be the number of studies in given years, methods of studies and sampling and summarized results of studies. This study employs documentary analysis as method appropriate to this aim and uses descriptive analysis in order to present the data as it is and content analysis in order to analyze the data deeply. A total of 93 studies have been found in all journals indexed in the database of Ulusal Akademik Ağ ve Bilgi Merkezi (Ulakbim-National Academic Network and Information Center) that are published between 2005 and 2016 (until March when data collection was carried out), consisting one of the keywords given above in its title and employs survey method. These studies will be examined in terms of some variables through descriptive and content analysis and tendency and change of these studies in time will be examined. A total of 42 studies have been found between 2005 when compulsory education was 8 years then and new curricula went live and 2010 when counted as the first five years of compulsory education and also the new curricula. The number of studies found is 51 after than 2011. The year in which there is the highest number of studies is 2010 with 18 studies and least are 2005 and 2016 with only one. The mixed method design was preferred less than quantitative and qualitative methods. There are scale development and adaptation studies on topics such as collecting teachers' ideas on constructivism and evaluating constructive learning environments. Data have been collected



from teachers, students, school managers and supervisors as samples. Besides, document analysis has also been done to find out the appropriateness of curricula to constructivism.

Keywords: Constructivism, survey studies, literature review, document analysis



Academic discipline: Science education

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Determining the Level of Using Smartphone in Education: Giresun Education Faculty Sample

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Zehra AKTAŞ

Technology develops rapidly and innovation, progress and growth developing with technology affect our life in multiple dimensions. Technology provides convenience in home, business and school. In addition to this, technologies' impact on the advancement of science is also undeniable. In other words, there is relationship between science and technology which are growing and developing together. One of the important technological tools smartphones is given a chance to try different activities in education as in many areas due to properties such as comfortable carrying, sending e-mail, internet access, sending audio/text messages, photographing making the camera recording and smartphones have been mobile learning tool. Smartphones utilization rate has increased in recent years but there are few studies about the level of using smartphone by university students in education. The purpose of the study is to examine the views of the preservice science teacher about the use of smartphone in education. The study group consists of 55 preservice teachers at Science Teaching Department of Giresun University Education Faculty. Questionnaire which was developed by researchers was used in this research. The questionnaire consists of two parts including 3 open-ended, 3 close-ended questions. Two expert's opinion was taken for the content validity of questionnaire and the final version of the questionnaire was given after the necessary corrections. The results of the study showed that preservice science teachers find adequate themselves the use of other tools such as computer, tablet, smartphone excluding interactive whiteboard. This study indicates that at the point of use of technological tools for teaching in the classroom, male preservice teachers find themselves more adequate than female preservice teachers. According to the findings, preferred uppermost application in smartphones was social networking sites (facebook, twitter, instagram etc.) by preserve science teachers. It was observed that Google was the main internet search engine. In addition to this, it was seen that magazines, newspapers, translation, play store also were commonly used. As a result of study, it was obtain that more than three-quarters of preservice teacher were used smartphones in many lectures for instructional purposes. In the study, it was suggest that the most preferred lectures by preservice teachers were content knowledge and content knowledge education to use smartphones. As a result, it is believed that this study will be beneficial for next studies about usability of smartphones in education.

Keywords: Smartphones, Preservice Science Teacher, Science Education, Technology in Education.

Development of Teaching Packs of Exhibitions in Science Centres into Elementary School Science Curriculum for Grades 5-8: Konya Science Centres Sample

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Due to rapid advances in science and technology, technological innovations have increased and science centres which provide learning out-of-school settings for growing population make contributions to visitors for free exploration, autonomous learning, sharing their experiences via collaboration and communication with groups. Science centres, which have considerable importance for science instruction in developed countries, are considered to be popularised in our country. In line with the decision of The Supreme Council for Science and Technology (SCST), a decision was taken to set up 81 science centres in big cities at the first stage by TUBITAK in order to popularise science culture. Within this framework, the first science centre supported by TUBITAK was opened on April 27, 2014 in Konya. Establishing science centres in Kocaeli, Bursa and Kayseri are still continuing. It is known that the main purpose of science centres is to have all visitors, but particularly children, love science. However, science centres which have been set up by investing a lot of money and making a lot effort have very important goals apart from popularising science to visitors. One of its goals is that they have a structure which promotes teaching activities carried out in class settings. Studies conducted reveal that if the exhibitions/materials in science centres are not connected to the curriculum, they do not go beyond being places where visitors usually have a good time and fun and it is quite important that trips to science centres should align with the curriculum goals. Moreover, it is stated that visits to science centres which fit into the curriculum and are implemented to serve a purpose make important contributions to instruction in the school.

In the light of this information in literature, it is thought that science centres which were started to be set up in our country should include teaching packs which will promote instruction in schools so that they can be used more effectively. Science courses in elementary schools are one of the most important courses which build attitude towards science, scientific thinking system and knowledge basis. Due to these reasons, exhibitions/materials in science centres should particularly be connected to science curriculum and these will make important contributions to the education of younger generation who like, understand, and use/produce science. The purpose of the research which will be carried out within this framework is to develop teaching packs to integrate exhibitions/materials in Konya Science Centre in elementary school science curriculum for grades 5-8. The teaching packs which have been developed will include the following information: which exhibitions / materials will be visited regarding the subjects/ concepts and gains in science curriculum, how to maximize the effectiveness of the trips (pre-visit and post visit materials) (information sheets before the trip, worksheets during the trip, and evaluation forms after the trip). These documents will be a resource for teachers regarding using science centres in science instruction and it will also connect science centres which were set up and continue to set up in our country to science curriculum. Moreover, the research can be regarded as a pre-study for science centres intended to be set up in 81 cities to promote science course.



Keywords: Konya Science Centre, Science Course, Science Curriculum, Teaching Packs.

Science Teachers' State of Using Schoolyards in Their Lessons: A Case Study From Giresun

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There are a lot of abstract concepts in science courses. Abstract concepts must be concretised so that students can understand these concepts or gains much better and misconceptions do not occur in students. Within this context, it is emphasized in science course curriculum updated in 2013 that both in-class learning environments and out of class settings or informal learning environments must be benefited from. One of the informal learning settings is schoolyards. This study aims at determining science teachers' state of using schoolyards in their lessons. Qualitative method was used in the study. The study was carried out in 2015-2016 education year in Giresun. Total 60 science teachers, 28 females and 32 males, working in Giresun and selected randomly participated in the study. The data were obtained with a questionnaire form. The form was developed by the researcher and consisted of open-ended questions. Content analysis was utilised for the statistical analysis of data. It was found in the study that nearly half of the teachers who participated in the study never benefited from the schoolyards and one-fifth of them sometimes used them. The results of the study reveal that as the teachers' years of experience increase, the use of schoolyard decreases. It was also found that science teachers benefited from schoolyard most frequently while teaching physics and biology subjects. Physics subjects especially consisted of sub-topics of force, movement, speed, sound, pressure and biology subjects included concepts like classification, ecology, pollination, and germination. In other words, it was revealed that schoolyard was used for teaching subjects and concepts which required mostly psychomotor and observation skills. Moreover, it was found that the teachers who used schoolyards in their lessons frequently used activities like educational games, observations, competitions, and experiments. The problems science teachers encountered while using the schoolyard were grouped under two themes: school based and teacher based problems. The main problem resulting from schools is that schools lack schoolyards. Safety, crowded classrooms, and inappropriate ground surface follow them, respectively. Within this context, the teachers stated that because school playground was inadequate, they experienced coordination and concentration problems and they could not use the schoolyard. In addition, they emphasized that because there were other students in the playground during the lesson, they disrupted the lesson and they caused discipline problems to occur among students. Teacher-based problems arise from not being able to provide discipline in school playgrounds, not being able to motivate students to learn in schoolyards, not being able to facilitate coordination, and not being able to know the appropriate methods and techniques for the activities in schoolyards. Within this scope, it was found that especially the teachers who could not use the schoolyard thought that due to the heavy curriculum and mainly following a test-based course, the activities done in the school



playground was waste of time. Moreover, it is found that science teachers promoted permanent learning most frequently with schoolyards, students had an opportunity to learn by doing, and they learned with fun. Within this scope, the teachers who used school playground state that abstract concepts become more understandable with learning through experience and this is promoted with appropriate educational games. In addition to this, it was determined that schoolyards promoted increase in students' motivation.

Keywords: Out of school, Science course, informal learning, schoolyard.

The Perceptions of High School Students for the Concept of English through Metaphors: Tokat Sample

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English teaching is affected by some factors such as individual's effort, interest and perceptions. Individuals' positive perceptions and attitudes to learning a foreign language affect this process positively but negative perceptions and attitudes affect it negatively. In this regard metaphors have been used to find out individual's perception about English in this study. Metaphors can be useful conceptual tools for, in and of education research. One common use of metaphor in education research is to illustrate or explain a concept in a way that will communicate effectively to the intended audience. Within the scope of this study metaphors have been analysed to understand and interpret 9th, 10th, 11th and 12th grade high school students' perceptions concerning English as a foreign language. Phenomenological method has been applied in this qualitative study. Phenomenology model focuses on phenomena that we are aware but can not comprehend fully and deeply. 420 students attending five different high schools named Anatolian Teacher High School, Social Sciences High School, Vocational High School For Girls, Anatolian High School (2) within Ministry of Education in Tokat have participated in this study. Of the participants 132 students are male and 288 students are female, among these students 176 students are 9th graders, 117 students are 10th graders, 66 students are 11th graders and the remaining 61 students are 12th graders. The data of the study was collected using a questionnaire formed with only one question which was prepared in respect to gap-filling method. To collect the research data, each student was asked to produce a metaphor and to complete the statement "English is like . . . because . . .". to draw an analogy. The content analysis technique was used in this study. As a result of the data analysis, it was seen that 420 students developed 249 different valid metaphors. As a result of the content analysis which was applied in this study, it was concluded that students reflect 179 positive perceptions, 216 negative perceptions and 25 neuter perceptions. In the direction of these results, it may be said that the greater part of the students have negative point of view to English as a foreign language. Another result of this study is female students developed a bit more positive metaphors than male students. Moreover, in terms of class variables 10th grade students developed 15% more positive metaphors than the other graders. But when we look at the other class levels, the rate of developing positive metaphor (36-38-39%) approximates each other. As understood from the metaphors provided by the students, they think that English subject is boring, difficult and rote learning subject. So in this respect, some suggestions can be offered such as using enjoyable activities, visual aids and teaching English by relating students' real lives and student centered way. Various materials can be developed and different projects can be given to enable students to learn English caressively and to understand that English is part of their real lives beyond dream. Moreover, concerning the importance of English some conversations can be done with students to emphasize its necessity in their future lives.

Keywords: Metaphor, Perception, English, English Teaching



Academic discipline: Mathematics, mathematics education
Paper ID : 23

Investigating high-achieving sixth grade students' erroneous answers on the angle concept in Yozgat

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The angle concept is a multifaceted concept having static and dynamic definitions. The static definition of the angle refers to “the space between two rays” or “the intersection of two rays at the same end point” (Mitchelmore & White, 1998), whereas the dynamic definition of the angle concept highlights that the size of angle is the amount of rotation in direction (Fyhn, 2006). Since both definitions represent two diverse situations and have unique limitations (Henderson & Taimina, 2005), students may hold misconceptions about the angle concept. In this regard, the aim of this research was to explore high achievers’ knowledge regarding the definition of the angle concept as well as to investigate their erroneous answers on the angle concept.

104 grade 6 students drawn from four well-established elementary schools of Yozgat, Turkey were participated in this research. All participants were selected via a purposive sampling method and their mathematics grades were 4 or 5 out of 5, and. Data were collected through four questions prepared by considering the learning competencies set out in the grade 6 curriculum in Turkey and the findings of previous studies whose purposes were to identify students’ misconceptions of the angle concept. The findings were analyzed by two researchers, and their inter-rater agreement was calculated as 0.91, or almost perfect. Thereafter, coding discrepancies were resolved, and consensus was established.

In the first question, students were asked to answer a multiple choice questions consisting of two statics definitions and one dynamic definition of the angle concept. Only 38 of 104 students were able to recognize these three definitions. Likewise, Mitchelmore and White (1998) investigated that less than 10% of grade 4 students knew the dynamic definition of the angle concept. Additionally, the purpose of the second question was to figure out how well students could recognize 0-degree angle. We found that 49 of 104 students were unable to recognize MXW as an angle. While 6 students indicated that the size of MXW is 0, other 6 students revealed that the size of MXW is 360. Therefore, 12 of 104 students correctly answered this questions. On the other hand, 28 of 104 students recognized the MXW angle as 180-degree angle. This finding demonstrated that these students have difficulties in naming the angles. Moreover, the third question consisted of three concentric circles with center O and two radiuses of the outer circle, and the intersection of the radiuses with these circles were named. Then, students were asked to compare the size of AOB, GOD and EOF angles. Only 36 of 104 students answered correctly by indicating that all three angles are equal, whereas 68 of 104 students incorrectly responded this question by revealing $AOB < GOD < EOF$. These students erroneously thought the size of the angle is related to either the size of the arc marking the angle or the area between the arms of the angle and the arc marking angle. These two erroneous strategies for determining the size of angles have been found by a few studies (Clausen-May, 2008; Devichi & Munier, 2013; Kim & Lee, 2014; Mithcelmore, 1998; Wilson & Adams, 1992). The last question, whose aim was to determine how well students

can adapt the angle concept to real life, consisted of an observer and a barrier, and students were asked to color the hidden area behind the barrier. Only 2 of 104 students correctly responded this question, whereas 19 of 104 students drew rays from the observer to both sides of the barrier, and colored the area covered by the rays, the observer and barrier. While 35 of 104 students just colored behind the barrier without using any strategies, 33 of 104 students constructed two perpendicular lines at the both end of the barrier, and colored behind the barrier. Similarly, Munier, Devinci and Merle (2008) found that this incorrect strategy was used by 27% of students. Consequently, we found that although the participants in this study were high achievers, they still held several misconceptions on the angle concept and had difficulties in adapting the angle concept to real life.

Keywords: The angle concept, misconceptions,; erroneous answers, high achievers



Academic discipline:
Paper ID : 25

Gifted Children' Perception Metaphor for Media

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In this study, 25 gifted students metaphor for thinking about the media using the analysis method in the 8-14 age group who continue to Samsun Science and Art Center has been determined. Students participating in the study to determine their thoughts on the media 'Media as is / are similar. Because 'he was asked to complete sentences. The content analysis was used in the analysis and interpretation of data.

Gifted students have produced 26 metaphor for the media. The resulting metaphors category separated. These categories informational function of the media, awareness-raising and educational function of the media as the media as a socializing function, as a function of entertaining media, creating kamon and olaraklandırıl media as agenda-setting function.

In conclusion: the use of superior children's general-purpose media information for the media thought they should have the idea. The most effective means of mass communication, television and other media to make it more functional elements, it is necessary to increase the people's intellectual knowledge and making better quality broadcast. Thus, it can analyze the events, has the power of individuals may be able to questioning the formation of a society. Perceive as reality everything presented to him, which broadcast the mass media publications unskilled made from vehicles, the world can not see with their eyes, not to be counted once individuals to be sensitive on these issues, criticism of publications and the creation of a public opinion on this issue seems necessary.

Keywords: Perception metaphorically, the media, gifted students

Academic discipline:
Paper ID : 28

**Investigation of Computer Game Addiction of the Outgoing Student Science and Art
Center (Samsun-Kirşehir Example)**

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Rapid development of information and communication technologies provide a positive or negative benefits in many areas. Nowadays, the recreational use of information technology is increasing day. One of the areas are used for in-game entertainment. Game in which individuals of all ages who have played on the internet or virtual environments, "computer game addiction" has made statements on the agenda. This research in 2015/2016 students attending the Science and Art Center was built with the aim to measure the computer game addiction. The study was conducted at screening model. The data in the study, "Personal Information Form" and "Computer Game Addiction Scale" was collected. The data gathered from the survey will be analyzed with descriptive statistics and the findings will be shared. gaming addiction and results of the research are expected to contribute to the literature on gaming habits.

Keywords: Science and art center, addictive games, digital games



Academic discipline: Educational sciences, science education
Paper ID : 29

Teachers' Beliefs about Reformed Science Teaching and Learning

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Constructivism has long been endorsed by science education community as the core element of effective science teaching and learning. Like many other countries, Turkey has recently been spending an increasing effort in implementing the constructivist approach in its education system. Curriculum programs in all levels of K-12 science education have been revised in parallel to the central tenets of the constructivist paradigm. The future success of the education reform efforts is heavily dependent on the support of the teachers. Several research studies agree that a successful implementation of the educational reform movements is accomplished by not only taking into account teachers' knowledge and skills, but also their beliefs, intentions, and attitudes (Haney, Czerniak, & Lumpe, 1996). However, despite increasing emphasis given to constructivist ideas in Turkish education system, little is known about the beliefs of practicing teachers regarding the reformed science teaching and learning. Having a better understanding of what teachers think about the reformed science teaching and learning is vitally important for the further promotion of the constructivist ideas in the education system. Any professional support that teachers need in integrating constructivist ideas in their classrooms is ultimately contingent upon analyzing their beliefs about reform efforts. Problems occurring to update teachers' knowledge, skills, beliefs and attitudes about the new trends in education would ultimately result in the failure of integrating the ideals adopted in the reform efforts (OECD, 1998). Considering the teachers' irreplaceable status in the educational change, their beliefs about reformed science teaching and learning were investigated in this research study. A total of 647 teachers from different regions of Turkey participated in the study. The teachers who applied for a summer science camp were asked to complete a questionnaire named "Beliefs about Reformed Science Teaching and Learning (BARSTL)" developed originally by Sampson, Grooms, and Enderle (2013). The original questionnaire consists of 32 items dispersed into the following four sub-dimensions: (1) how people learn about science (HPLAS), (2) lesson design and implementation (LDI), (3) characteristics of teachers and the learning environment (CTLE), and (4) the nature of the science curriculum (NSC). In this study, the questionnaire was adapted to Turkish language and examined properly in terms of the certain psychometric properties with regard to its validity and reliability. MANOVA statistical test was used in analyzing the teacher responses to the BARSTL questionnaire. Each one of the sub-dimensions of the BARSTL questionnaire was treated as a dependent variable. Teachers' responses in each sub-dimensions of the questionnaire were analyzed in terms of the following independent variables: gender, educational background, regional work location, teaching discipline, and years of teaching experience.

The results of the study indicated that the teachers were mostly in favor of reformed science teaching and learning. The relatively higher overall mean scores of the teachers in the specific sub-dimensions of the questionnaire their tendency to support the science teaching and learning approaches adopted in contemporary science education reform documents. A

statistically significant multivariate difference was found in data analysis with respect to gender [$F=$], teaching discipline [$F(8,1284) = 3.00, p<0.05$] and teaching experience [$F(16,2568) = 4.67, p<0.05$] variables.

According to the results, female teachers had significantly higher scores in the questionnaire than their male colleagues, which suggested that female teachers internalized reform ideas more than the male teachers. However, no statistically significant multivariate effect on teachers' belief about reformed science teaching and learning was detected in terms of teachers' educational background [$F(4,642) = 1.52, p>0.05$] and regional work location [$F(24,2560) = 1.48, p>0.05$] variables.

In a nutshell, the results of the research study revealed that there existed several factors influencing teachers' beliefs about science teaching and learning. Gender made a difference in teachers' beliefs about science teaching and learning. Female and male teachers' beliefs about reformed science teaching and learning were found to be significantly different in a favor of female teachers. Years of teaching experience appeared to be an important factor influencing teachers' beliefs regarding science teaching and learning. In this study, teachers who have relatively less teaching experience demonstrated more constructivist beliefs in some of the subdimensions of the questionnaire than more experienced teachers. In terms of teaching discipline variable, science teachers tended to have more constructivist beliefs in science teaching and learning than elementary and physics teachers. However, teachers' educational background and regional work location made no statistically significant difference on teachers' beliefs about science teaching and learning.

Keywords: Teachers' beliefs, constructivism, reformed teaching and learning



Academic discipline: Future expectations of students, in-service teachers, pre-service teachers, educators and policy makers

Paper ID : 31

**Attractiveness of College Buildings In Terms Of Supplying Erasmus Students'
Motivation (Evaluation of Erasmus Program Sinop Education Faculty 2006-2016)**

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How academic culture occurs? Schrettle (2007) express this in-depth argumentative question: Academe defines itself through certain performance requirements and competences that are internally and externally visible and verifiable to a high degree. Three domains these evaluations are:

Giving shape to time: Academic life produces its own rhythm. Lectures, seminars, courses and examinations are the cornerstones of student life. Many students orient and organize their lives around them.

Giving shape to space: When we enter other people's homes, for instance at a social event, it does not take us long to see how they live. Are there pictures on the walls? Are there cards that remind the family of central events? What books are there, if any? A house or apartment is charged with an atmosphere.

At any college and in similar buildings there will unavoidably be an abundance of miscellaneous notes and pieces of information on the bulletin board and elsewhere. They are among the first things to meet our eyes at the entrance and in the hallway. But they should not be the only "decoration" of a building like this.

Encouragement: On the one hand, culture is something that has to do with the exterior, which has so far been the focus of reflections. How do we shape time and space, and how do we allow our lives to be touched by the great outside world?

Respect of Person: We live in a society whose most prominent feature is functional differentiation. Status and acceptance depend on the performance that achievement within the framework of a differentiated social order. I function, therefore I am.

Mutuality in the communication between professors and students: Communication determines and constitutes the day-to-day life in academe. It takes place at several levels. There are various examples of a lack of culture of communication in our society.

It is certainly justified to pursue professionalization of teaching. This means focus on the necessary competences in the communicative, social, and emotional of course professional/specialist areas. This professionalization teacher to be highly flexible but also obliges them to subordinate their own interests and personalities. Even though this professional side is important, even indispensable, it is not everything. Encouragement in the face of many discouragements that students suffer involves a conscious decision for and attitude toward students.

The traffic of Erasmus program sharply increased in Turkey especially one direction, Turkey to European countries in last ten years. This manuscript is about Erasmus studies of Sinop Education Faculty that is located in the most north part of Turkey (Black sea shore). This study was conducted in three parts. In the first part the beginning of the Erasmus program of Sinop Education program in 2006 was presented. In the second part, the available state was presented. In the third part, whether the faculty buildings were enough for the students who joined Erasmus program in spring term in 2016 or not was evaluated. In this study, the



quantitative data gathering methods were used. Quantitative documents like internet pages, visitor professor presentations and photographs were analyzed via text analysis. In 2006, none of the students wanted to go to other countries with Erasmus program whereas, 23 students managed to have a successful Erasmus visit in 2013. This stated was resulted from the intense work of Erasmus faculty coordinator. In this study the ideal of Erasmus faculty building was presented. It is thought that the present visits don't supply the students' needs. Future studies should be conducted on motivational studies of self-determination theory and from the perspective on emotionality of social learning. We should bear in mind that new horizons of students' mobility should be conducted in cross cultural understanding of self determination expression for people.

Keywords: Sinop education faculty Erasmus program, college buildings features, needs hierarchy, self-determination theory



Academic discipline: Foreign language education, english language education
Paper ID : 32

Improving English as a Foreign Language (Efl) Learners' Literacy Skills through Digital Storytelling

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Building 21st century literacy skills in every field of education has become one of the objectives of educational policies in almost each country. In a broad sense, 21st century skills refer to a set of knowledge, skills, and characters which are believed to be of great importance for today's students' success in the ever-changing technological environment. There is no doubt that one of these skills which is desired to be enhanced is Information and Communication Literacy Skill (ICT) of today's students. Educators and educational practitioners have been constantly searching for how to foster students' ICT literacy skills best so that they can keep up with the recent developments. In this context, EFL learners' literacy skills need to be improved as they will encounter digital natives when they start teaching. One of the effective ways of fostering ICT literacy skill is to utilize digital storytelling in foreign language classes. Because digital storytelling combines multiple modes of technology such as photographs, music, movie maker and recording tools, video clips, text, audio narration, and etc. to produce successful stories, EFL learners need be competent enough to be able to use these tools effectively. Digital stories enable learners to produce oral, written, and visual messages and to interact with others. The present study attempts to highlight the possible benefits of digital storytelling and indicate how students' projects as to digital stories help them to improve their ICT literacy skills. To this end, prospective English language teachers' projects on creating digital stories were examined within the scope of computer-assisted language learning (CALL) course which was offered as an elective course for senior students in the spring term of 2015-2016 academic year at the department of English Language Teacher Education (ELT). Analysis of the projects prepared by the students show that students' ICT skills can be considered to be highly satisfying in terms of incorporating different technological materials into a single story. It can be concluded that being one of the most important 21st century skills, ICT literacy skill can be enhanced through preparing digital stories to a great extent.

Keywords: Digital storytelling, ICT skills, technology, language teaching

Mathematical Reasoning in 7th Grade Students

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Mathematics appear in everywhere and every part of our lives. Therefore, a connection between mathematics and everyday life should be established; students should be taught how to approach situations. Handling a situation requires discovering the connections among situations. The process of establishing a connection and discovery are related to thinking skills. What fundamentally distinguishes human beings from all other living creatures on earth is thinking skills. Hence, using thinking skills effectively is a necessity in today's world. The process, in which all factors related to a situation is attentively taken into consideration and a rational result is obtained, is named as reasoning. Being aware of the power of reasoning helps us understand whether a person possess an adequate level of knowledge of what he/she reasons. In the process of reasoning a person examines and researches all situations related to the event he/she is faced with, makes assumptions through reasoning, looks for hypotheses to ground his/her assumptions, and tries to reach a conclusion.

This study was conducted with the aim of determining the reasoning skill levels of 7th grade secondary school students in mathematics course. The reason why we chose 7th grade secondary school students is because this age group possesses abstract thinking skills. This is because reasoning skill is a process that requires high level thinking skills. It is believed that students, who have not developed abstract thinking skills, will fail at solving such problems. The study was carried out with 94 students in total, who study in a state school in the Black Sea region of Turkey during the first semester of the academic year of 2015-2016. 45 of the students are female students, whereas; 49 of them are male students. Two problematic situations developed by Erdem (2015) in his doctoral thesis, which is named as the Effect of Enriched Learning Environment on Mathematical Reasoning and Attitude, have been used in this study. The problems were organized in such a way that they revealed students' high level thoughts. In the problem solving process, the students are required to determine what is given and asked in the question and to proceed with the solution. The mathematical reasoning skills expected from the situations for the problematic situation were analyzed according to the mathematical reasoning phases of TIMSS (2003). TIMSS (2003) examines problems in five phases. The first phase is analyzing, the second one is generalizing, the third one is establishing connections, the fourth one is deciding, and the fifth one is solving non-routing problems.

The data retrieved in the study were evaluated via content analysis, which is one of the qualitative research methods. In order to ensure the reliability of the study, the retrieved data were exposed to expert opinion and their agreement percentage was calculated. The agreement percentage was obtained through using the agreement percentage formula, developed by Miles & Huberman'ın (1996:64). The calculated agreement percentage is 99%, which confirms that the data were reliably calculated.



Consequently, examining the answers given by students to problems, it is determined that the students presented their reasoning skills through indicating what was asked and given in the question while solving the problems. Moreover, examining the answer sheets of students suggests that the students obtained the solution through making use of geometrical figures while solving the problems. This indicates that the students used spatial reasoning. It was also determined that some students used the table method. A part of the students did not understand the questions, thus failed to obtain the correct answer. A small number of students did not make any judgements for the solution to the problem.

Keywords: TIMSS, reasoning, secondary school mathematics course, mathematical reasoning

Reasoning Skills of Secondary School Students towards Pisa Questions

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Mathematical reasoning is believed to enable students to conveniently use mathematics in their mathematics courses as well as in their every day life. In mathematics, the truth is not obtained through experiments or observation, but only through reasoning (Umay & Kaf, 2005:188). Therefore, reasoning skill is one of the most significant skills that needs to be improved. Examining elementary and secondary school curricula, it is apparent that reasoning skills are one of the skills, which should be improved. That is because it is possible to find out the way of student's thinking through reasoning skills. Reviewing the literature of mathematics education, the studies investigating mathematical reasoning draw attention (Ball, Stacey & Pierce, 2001; Lannin, 2001, 2003; NCTM, 2000; Umay, 2003). This is due to the fact that mathematical reasoning has quite and important structure for the process of learning and teaching mathematics.

The objective of the study is to reveal the mathematical reasoning skills of 8th grade secondary school students towards PISA questions. This research has been conducted during the academic year of 2015-2016. The study was carried out with 51 students in total, from a province in the Black Sea region of Turkey by using random sampling method. Case study method was employed in this study. The reasoning statements expressed by students during problem-solving were analyzed via content analysis method. In order to ensure the validity of the scope, agreement percentage formula, developed by Miles & Huberman'in (1996:64), was used.

The problem called Energy Needs from the Chapter 1 of normal units, which is named Problem Solving Questions from PISA (Program for International Student Assessments) (2015), as the data collection tool for the study. This is a two phased problem, which includes two separate problems. The first problem is about choosing the convenient food to eat for a person living in Zed country in order to meet his/her energy needs. The energy needs of different people were denominated in kilojule (kJ) in the question. For this questions, students were expected to examine the table, which demonstrated daily energy needs for adults, and later to determine the activity level of the adult in questions, to determine energy needs of the adult, to follow the data provided in the question, and finally to calculate the energy need of the adult in question in kilojule. In the second question, a sportswoman named Jale and her friends go out to dinner and approximate amount of energy for each portion of meals are stated in the menu they receive. Moreover, there is also a special menu with fixed prices. Jale's total energy consumption and the amount of energy she needs to consume are demonstrated. The students were expected to decide whether the fixed menu is appropriate for Jale or not and to indicate the operations they conducted in their decision-making process. They were also required to pay attention that the difference between amount of the total energy Jale should ideally take and the amount of energy Jale consumes on a daily basis should not exceed 500 kJ. They were expected to calculate the amount of energy Jale



consumed all day from the menu and to demonstrate what kind of differences there would be if she ate from the fixed menu or the regular menu.

The problems were evaluated and analyzed according to mathematical reasoning problem solving skills of NAEP (2002). The mathematical reasoning skill is considered within the framework of problem solving skills. NAEP (2002) evaluates reasoning skill in three phases. Elaborating these three phases; reasoning skills is classified as follows. These phases are firstly, determining whether students use problem-solving strategies, the data related to the problem, and the related mathematical information; secondly, determining whether students use reasoning skills (i.e. inductive, deductive, statistical, and proportional); thirdly and finally, determining whether students have delivered the correct decision on their solution's convenience and accuracy after solving the problem. The students solved these problems and their solutions were evaluated according to these three phases.

In the first phase, which determines whether students use problem-solving strategies, the data related to the problem, and the related mathematical information, the findings suggest that the students wrote down the data related to the problem and clearly determined what was expected from them. It was observed that the students used their knowledge by mathematically associating what was expected from them with the information provided in the problem. In the second phase, which determines whether students use reasoning skills, the findings suggest that students used their inductive, deductive, statistical, and proportional reasoning skills while solving the problems. In the third and last phase, which determines whether students have delivered the correct decision on their solution's convenience and accuracy after solving the problem, it is observed that majority of the students checked the accuracy of their solution and crosschecked to determine whether they correctly solved the problem. In a general sense, the students used their reasoning skills while solving the PISA question and solved the problem according to the phases of NEAP.

Keywords: Reasoning, mathematics, secondary education, Pisa

**Enriching Conceptions of Science in an Informal Learning Environment: A Science
Summer Camp for Teachers**

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Science historically has played a major role in the civilizational advancement of humanity. For science to maintain such role increasingly in the years to come, it demands a higher recognition and admiration by a larger part of the society. This is likely to occur only if new generations are provided a better insight into the various characteristics of science. That is one of the reasons that global science education standards all over the world promote the teaching of nature of science (NOS) concepts to students. However, the main obstacle in giving a satisfactory education to students about NOS concepts arises from incompetent teachers who themselves need support to gain a comprehensive understanding of the most salient aspects of NOS. Many teacher candidates suffer from the insufficient education given to them about NOS concepts in their university education. After graduating from the university, the chances are pretty slim that they are offered enough opportunities for their professional development about NOS concepts. Informal learning environments, particularly summer science camps, bear the potential to help practicing teachers engage with activities targeting the specific NOS concepts in an authentic context. An effort was made in this study to help elementary, science and physics teachers to deepen their knowledge in certain aspects of NOS. A total of 56 teachers, 19 of whom were elementary teachers, 19 of whom were science teachers and 18 of whom were physics teachers, attended a week-long astronomy science summer camp. The camp program included several activities for teachers about NOS concepts. The main purpose of the present study was to investigate the progress in NOS concepts made by the participant teachers in this informal learning environment. The instrument used in the study as a pretest and a posttest consisted of 11 items extracted from Views on Science-Technology-Society (VOSTS) instrument developed originally by Aikenhead, Ryan and Fleming (1989). The responses given by teachers to the specific items in the instrument were scored as “novice, plausible or appropriate”. The data analysis in the study was made using nonparametric statistical tests (Mann Whitney-U test and Kruskal Wallis test). The novice responses given by participant teachers to several items in the instrument indicated their need for support in certain aspects of NOS. The specific teaching disciplines of the teachers did not have a statistically significant effect on their pretest mean scores. Regardless of their teaching disciplines, the participant teachers made a statistically significant improvement in five aspects of NOS. This might be attributed to the effectiveness of the informal learning environments, science summer camp in this case, in supporting the practicing teachers about NOS concepts

Keywords: Nature of science, informal learning environments, summer science camps, science education



Academic discipline: Science education

Paper ID : 40

Effectiveness of Meaningful Learning Activities' in Teaching of Some Chemistry Concepts

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The purpose of this study is to examine the effectiveness of the activities developed by the expository teaching model. The research was conducted by using quasi-experimental research. In experimental group, subjects were applied to the activities developed for the expository teaching model; in control group, subjects were applied according to the current teaching model. The sample of the study consists of two seventh grade students in middle school who were selected randomly through sampling method. Research data were collected with a concept test developed for some chemistry concepts. To determine students' learning quality and whether they learn the concepts meaningfully, the levels category of understanding that exists in the literature and independent samples t-test were used. When the findings about their understanding of the concepts investigated, the experimental group accomplished sound understanding than the control group about elements, components and mixture concepts. The understanding of the two groups were at the same level were seen about the structure of the atom. This result could be caused as the control group as taught about the structure of the atom throughout a year. It is observed that both groups had some misunderstandings about ion, element, compound and mixture concepts after the given education. In the findings of the indeedent sample t-test, the experimental group students are more successful than the control group and there is a meaningful difference in favor of the experimental group. As a result, the students have difficulty and misunderstandings in learning although they were given all activities during the teaching sessions. To realize the meaningful learning, the students should be given such type of activities and they should acquire these skills. The activities should be given ready-hand till the students get used to them. Then, they should be helped develop their own activities to realize thair meaningful learning.

Keywords: Meaningful learning, chemistry concepts, expository teaching model

Academic discipline: Foreign language teaching
Paper ID : 46

**An Analysis of the Methods and Techniques Used by the Teachers in English Lesson at
Primary Schools in Turkey**

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This study investigated the choice of methods of teachers and reasons for this preference in English lessons at Primary Schools in Turkey. This study was qualitative in nature and comprised ten English teachers working at two primary schools in Ankara, Turkey. A survey which had two sections was administered to the participants in written form. The first section of the survey was composed of the demographic data of the participants such as the experience of the teacher and the department graduated and the second part involved the open-ended questions on the choice of language teaching methods and the reasons for this preference. The results of the study revealed that teachers mostly used question and answer technique and communicative method in the classroom. The number of the students, technological utilities, and the language level of the students directly influenced the method used by the teachers in the classroom. It was also highlighted in this study that the importance of interaction and the role of culture made language teaching different from other disciplines.

Keywords: Language teaching methods, approaches and methods in language teaching, early language teaching



Academic discipline:
Paper ID : 48

**The Effect of Different Metacognitive Skill Levels on Preservice Chemistry Teachers'
Confidence in Technological Pedagogical Content Knowledge**

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Pedagogical content knowledge is entitled to content-specific techniques teachers know and use for teaching content knowledge. The metacognitive teachers are tended to use technological integration in their teaching and in student learning. Also, they will be supposed by their content knowledge to evaluate and analyse websites and applications for appropriateness for teaching the content and assure that instruction facilitates student content knowledge (Keengwe & Maxfield, 2015). So in this study, we wanted to determine the metacognitive skill levels of preservice chemistry teachers and to investigate the effect of different metacognitive skill levels on their confidence in technological pedagogical content knowledge. In the study, survey method which is one of the quantitative research methods was used to determine the effect of different metacognitive skill levels on confidence in technological pedagogical content knowledge. The study was conducted during 2015-2016 fall semester. A total of 75 preservice chemistry teachers participated in the study. The participants of the study were comprised of preservice chemistry teachers attending the Faculty of Education in a public university. Purposeful sampling method which is one of the non-random sampling approach was employed in collecting the participants. Answers to the following questions were sought for the purpose of the study: (1) What is the level of preservice chemistry teachers' metacognitive skill? (2) Are there any statistically significant differences between preservice chemistry teachers' confidence in technological pedagogical content knowledge according to different metacognitive skill levels? As a data collection tool, The Metacognitive Activities Inventory (MCA-I) which was developed by Cooper and Sandi-Urena (2009) and adapted into Turkish by Temel, Dinçol and Yılmaz (2011) was applied to determine preservice chemistry teachers' metacognitive skill levels. The MCA-I is a 23- item, 5-pointed Likert type scale. Also, the Technological Pedagogical Content Knowledge Confidence Survey (TPCKCS) developed by Graham, Burgoyne, Cantrell, Smith, and Harris (2009) and adapted into Turkish by Timur and Taşar (2011) was used to determine preservice chemistry teachers' confidence in technological pedagogical content knowledge. The TPCKCS consists of four dimensions as follows; technological pedagogical content knowledge, technological pedagogical knowledge, technological content knowledge, and technological knowledge. Firstly, the data obtained from MCA-I was analyzed. Three groups were formed by using the grouping method developed by Cooper, Sandi-Urena and Stevens (2008). While Low group (L-Group) was composed by the participants with metacognitive skill scores below the mean value minus one standard deviation, High group (H-Group) was composed by the participants with scores above the mean score plus one standard deviation. However, Intermediate group (I-Group) was composed by those whose score is between these extremes. Then, one-way MANOVA test was employed in determining the effects of preservice chemistry teachers' metacognitive skill levels on their technological pedagogical



content knowledge, technological pedagogical knowledge, technological content knowledge, and technological knowledge. At the end of the study, the obtained one-way MANOVA test results were presented and interpreted.

Keywords: Confidence, metacognitive skill levels, preservice chemistry teachers, technological pedagogical content knowledge



Academic discipline: Educational sciences, curriculum & instruction, assessment
Paper ID : 49

Investigating Teacher Candidates' Use of Formative Assessment: Action Research Model

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Assessment serves different purposes in education. Contemporary assessment strategies is not only used for evaluation but also for learning. Unlike summative assessment, formative assessment activities provide feedback to the students and teachers during the learning process in the classroom. The research shows that formative assessment strategies play an important role to improve student learning and achievement if implemented properly (Black ve William, 1998; Volante ve Beckett, 2011). Therefore, teacher candidates should learn and practice assessment strategies effectively in teacher education programs. However, teacher candidates rarely encounter appropriate opportunities to practice assessment strategies during their university education.

The purpose of this action research study was to improve formative assessment abilities and attitudes of teacher candidates. In this study, an answer was sought to the following research question: What were the benefits of using formative assessment strategies in a real learning environment for teacher candidates? Qualitative data was used to determine teacher candidates' formative assessment practices. In the process of the implementation of formative assessment strategies in a real learning environment, their thoughts and reflections about the assessment practices were collected via open-ended questions.

The participants of the study was 12 senior preschool teacher candidates enrolled in Research Project Course at Sinop University. During the course, the teacher candidates also attended a Kindergarten located in Sinop for their teaching practicum. The teacher candidates were assisted in observing, teaching and assessing the preschool students by their instructor/researcher. In this process, teacher candidates initially observed the preschool class appointed to them. At that time, they observed the students carefully to identify any learning difficulties and planned their instruction for the chosen students. After the observation of the students, teacher candidates were given the opportunities to teach and to assess in the classroom in the following three weeks. Formative assessment strategies were implemented to the students periodically. Teacher candidates kept journals and used observations, control lists and rubrics to improve their instruction and student learning throughout the three weeks. After the three-week period, teacher candidates completed open-ended questions posed to them to describe their attitudes about using formative assessment strategies in the classroom. The researcher asked open-ended questions to determine teacher candidates' attitudes toward using formative assessment strategies.

Teacher candidates' responses were analyzed and interpreted by a content analysis approach. According to the open-ended responses and reflections provided by the participant teacher candidates, the majority of the teacher candidates in the study developed a positive attitude toward the formative assessment practices. The responses of the teacher candidates indicated that the experiences offered to them in this research study helped them improve their skills and attitudes toward formative assessment strategies.

Keywords: Formative assessment, teacher candidates, action research

Academic discipline: English language teaching
Paper ID : 50

Googleable or non-googleable topics for writing assignments?

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Writing is one of the two major productive skills in language learning; and just like its oral equivalent ‘speaking’, it involves text production. Considering the development of writing skill from an educational point of view, it can be said that producing written text is generally based on the regular writing assignments given to students in language classes. While studying on the assignments, one of the most important responsibilities of the students is to avoid copy-paste and therefore plagiarism. However, in some cases students may tend to copy-paste availing themselves of the vast opportunities offered by Google. This all-knowing database appears as one of the most ground-breaking innovations of the late 20th and early 21st century and has recently been the number-one destination for people with any kind of question in their minds. Nevertheless, asking everything to Google and using the readily available answer directly in writings is not something desirable in terms of developing writing skill, let alone concerns about copyright and ethics. Therefore, the assigned topic should orient students to employ their imagination, creativity, and critical thinking skills at utmost level while leaving them an acceptable amount of space to consult Google. Under this framework, this study aims to compare googleable and non-googleable writing topics with a focus on their pros and cons. To this end, sample writing topics covered in writing books taught at university level in Turkey will be investigated in terms of the extent to which they appear googleable or non-googleable.

Keywords: Writing skill, googleable, non-googleable, technology



Academic discipline:
Paper ID : 53

A Shift from Call to Mall?

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The constant development of technology has a number of direct and indirect influences on human life. Education is one of the realms that closely feel the reflections of the fast technological developments; and as a sub-field of education, foreign language learning is also affected by technology to a notable extent. Technology-enhanced Language Learning (TELL) appears as an umbrella term here to bring together all the aspects technology serves language learning. Under TELL, Computer-assisted Language Learning (CALL) has held a great popularity in recent decades with the unprecedented advances in internet technologies and Web 2.0 tools. However, in recent years portability of technological devices has possessed top popularity for the young generation. As a part of this recent trend, a new term ‘Mobile-assisted Language Learning (MALL)’ has appeared on the agenda and begun to attract the attention of many researchers and educators in the field. Considering the rise of mobile devices and smartphone technologies, this study aims to discuss some questions. Is MALL replacing CALL? Are CALL and MALL alternatives to each other, or just complement each other? Which term is more popular among researchers? What are their pros and cons? Which one is more practical and advantageous for language learners? Which one is more likely to be involved in the future of language learning and teaching? Are CALL and MALL replacing the live language teacher? By providing brief and to-the-point answers for these questions, the researchers aim to clarify the positions of these two popular trends in the field of foreign language teaching and learning.

Keywords: Mobile-assisted language learning, computer-assisted language learning, technology, language learning

Academic discipline: Curriculum and instruction
Paper ID : 54

**A Scale Development Study to Determine the Self-Efficacy Perception of Students on
Written Exams**

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The evaluation of the students' efficiency by the institutions has been a debate recently. The institutions are trying to carry out written examinations consisting of open-ended questions and provide the adaptation of students to these kind of evaluation technique. Ministry of Education is trying to manage a project called Abide to develop the thinking skills of the students. Student selection and placement center (OSYM) has performed an exam consisting of open-ended questions to evaluate different thinking skills rather than memorization. According to the Pisa results, the students have difficulty in answering open-ended questions. Experts agree with the idea that students should be developed thinking skills by getting open-ended questions rather than multiple choice question. The tendency towards the open-ended question has been increasing on the evaluation and assessment day by day. In this study, developing a scale to measure the self-efficacy towards written examinations consisting of open-ended questions intended. The application scale of the self-efficacy towards written examination consisting of open-ended questions was developed in the direction of the high school and secondary school students. The validity and the reliability of the scale is done on the data gained from 305 students elected by the method of convenience sampling. 305 students have the scale in Sehit Piyade Er Murat Eroglu secondary School and Mamak İmam Hatip High School located in Ankara. At first, the scale was prepared as 61 items. Then 36 items are taken out related to factor analysis 25 items left. According to the factor analysis results, there are 3 factors. The first factor has 15 items, second factor has 7 items and the third factor has 3 items. The factors are 'self-confidence', 'higher order thinking' and 'effort'. As a result of factorial validity of the scale, items change between .416 and .722. Bartlett Test of Sphericity is meaningful so as to construct validity Exploratory Factor Analysis. So as to identify the distinctiveness of the items, a calculation done by comparing % 27 upper group scores and % 27 lower group scores. KMO (Kaiser-Meyer Olkin) value is 0.870 and the value of (Cronbach alpha) calculated for the reliability study is .887. Findings related to the studies of validity and reliability show that the scale has a valid and reliable form. As a result of factor analysis first factor which is named self-confidence consists the 18th, 27th, 29th, 30th, 31st, 32nd, 35th, 36th, 37th, 38th, 41st, 42nd, 44th, 45th, 57th items, second factor named as higher order thinking consists of the 30th, 28th, 39th, 46th, 47th, 54th, 56th and the third factor named as effort consists the 48th, 49th, 50th items. The scale is considered as having three dimensions. The first factor, self-confidence; between .416 and .614, for the



second factor ,higher order thinking skills ; between .446 and .669, for the third factor, effort; between .641 and .722 for the total correlation of items. Credibility values for the first factor is .86, for the second factor is . 72 and for the third factor is .63. Total variance explained by the scale is % 40. We can conclude that the scale is reliable. The scale can be used to identify the self-efficacy of students towards open-ended questions in written exams. The study is the first to ascertain the self-efficacy of students towards open-ended questions. In this way, Self efficacy of students on open-ended questions can be got the core of the subject. New solutions can be found to develop the self-efficacy of students on open-ended questions.

Keywords: Open-ended questions, self-efficacy, assessment and evaluation, self-efficacy scale

Development and Validation of the Achievement Test of Body Systems

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This paper presents evidence for the development and validation of an "Achievement Test of Body Systems" which is a unit in 7th class Science Education lesson. The test was conforming the gains described in the Turkish National Science Program for 3,4,5,6,7 and 8th classes. At the same time number of gains, step of gains according to Bloom's taxonomy, number of lessons to finish all unit and former learned concepts were driven into account for creating items. The test, of which the content validity is reviewed and ensured by 1 expert and 2 science teachers. One of the teachers was doing her PhD degree and one of them was doing his master degree. The pilot test was made up of 48 items selected from initial 78 items and the sample consisted of 245 7th grade students. Kaiser-Meyer-Olkin Test (which is a measure of how suited the data is for Factor Analysis) was done. Kaiser-Meyer-Olkin value was 0.89 and the result indicates that the sampling was adequate. Analyses based on classical test theory, using %33 of the upper and lower classes for item difficulty and discrimination indices. And it was used KR-20 for the reliability. After omitting 3 items; the item difficulties were between 0.36 to 0.81, the item discrimination indices were between 0.40 to 0.89 and internal consistency of the test (KR-20) was found 0.898. Results indicates that Achievement Test of Body Systems has satisfactory psychometric properties and it can be accepted as appropriate for future use.

Keywords: Achievement test, validity and reliability, body systems



Academic discipline: Turkish Language and Literature
Paper ID : 57

The Relation between Language-Culture and the Reflections of Amasya Culture on the Ballads

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Language and culture are the two of the main elements forming a nation. These two elements have the qualifications completing, feeding and carrying each other. Language is the basis for culture, but what determines the figure, pronunciation and meaning of each word in the language is the culture. This relation reveals the necessity of considering these two elements together. Therefore, the study has been carried out in the context of language culture relationship. Folk songs have been selected as a cultural element in the study. Folk songs are usually folk poetries having a particular melody. This term consisted by adding relative inflectional (-i) to Turkish proper noun means related to Turk, particular to Turk. These cultural elements belonging to Turks hold the names of the places, the significant events, the people living in the region. Some also reflect life-style of the region, true life great heroism or romances. It is possible to get findings for the life-style of any region, social and economic structure, historical and human relations through ballads. In this study, we tried to identify the cultural elements of Amasya with reference to ballads of Amasya.

Amasya is the place where people keep social, economic, religious and cultural relations throughout history. History, religion and romance one within another was lived intensely here. Therefore, countless ballads were produced which tell heroism, reflect the economy of the city or is sung for the beloved in serenade way. In this study, culture was accepted “as the whole of tools which are created in historical ,social development process with all material and nonmaterial values, used for transmitting to the next generations ,show domination measure to the person’s natural and social environment” (TDK Dictionary , 2013) For this reason, all kinds of instruments, buildings, clothings, beliefs, folkways, norms, ways of thinking, person names, grown plants...etc which are mentioned in ballads are considered as cultural element. Hence, viewing ballads from this aspect (considering their contents in this way) means seeing a picture of Amasya which includes Ferhat and Şirin, sultan’s sons, apple, Yeşilirmak...etc.

The population of the study consists of all the ballads belonging to Amasya. However; the study has been limited by accepting 89 ballads recorded and published under the name of Amasya ballads (2008) as the sample representing the population. These 89 ballads have been examined via document scanning method, document analyses have been conducted and the mentioned cultural elements have been detected.

As a result of the study; concrete data belonging to Amasya culture have been reached in the ballads. The elements such as the historical structure of the city in the ballads (Single Gate, Magdenus Bridge etc.), important people who have lived here (Ferhat and Sirin, Bogun Kose Kenan etc.), animals (cuckoo, ilganus etc.), the flowers grown (Kargapapuc, violet etc.), fruits-vegetables-trees (okra, cherry, willow etc.), the consumed foods (Hasuda, Iskefen etc.), dresses worn (bandik, rastik etc.) the geographical structure of the city (mountain, river etc.)



and the impact of them on the people (psychological relief given by walking down the river etc.) are some parts of these results.

Keywords: Language and culture, Amasya ballads, cultural elements



Academic discipline:
Paper ID : 62

Vocabulary of Amasya Legends in the Context of Language Culture Relation

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Amasya, which is one of the oldest cities of Anatolia, hosts many civilizations such as Hittites, Phrygian, Cimmerians, Scythian, Medes, Persian, Roman, Seljuks, Danishmends, Ilkhan and Ottomans. Especially, many sultans in Ottoman Empire were born in Amasya and became shahzadah to Amasya. The best known shahzadahs are Mehmet I, Murat II, Conqueror Mehmet, Sultan Yavuz Selim. These sultans lived their childhood and their first management periods in Amasya. Some sultans such as Çelebi Mehmet and Murat II also married to girls from Amasya and have children too. Many vizier, grand vizier grew up in this land, and at last, one of the most important step of Independent War was taken in Amasya. Religious and cultural background of the city are also as wealthy as the historical background. Also, it is known as "Sainthood city" in Turkish-Islam culture, because, there are many tombs and graves which belong such as Saint Ali Hafız, Halkalı Evliya, İğneci Baba, Abdurrahman Çelebi, Hicabı Abdalbaki in Amasya and its districts. Furthermore, Amasya became famous as legendary city where Ferhat and Şirin's Love was lived.

As it is seen, many public tellers come out in time in Amasya which history, religion, culture and love were lived intensely. Each of these public stories is an important verbal cultural product. It is possible to separate these works to literary genres such as tale, public story, myth, legend. In this work, the texts in legendary genres are subjected, others are out of research. Legends are events which were lived by someone who real or unreal. It is believed that these events are real. So, these legends can be an important source of data to analyse the history, social-cultural structure, perception style of life which come out the civilization, but also they can be used in dialect researches as for they are verbal stories.

This work based on the texts of legends which was presented and collected as doctorate work with the name of "Amasya Legends in view of Structuralist" by Ahmet Dağlı in 2002. In this study, total 10 legends which has common telling in oral culture in Amasya region have been turned into written text. In these texts, Resul Dede Saint, Şeyh Sadi Saint, Yeşilirmak in Amasya, Çoban Baba Saint, Erenler Saint, Abdurrahman Dede Saint, Hızır, The Cause of Snake Reptation, Djinni, Lokman Doctor are the legends which are known as those names. These legends are important in view of transmitting verbally the life and value in Amasya to generation to generation. Contents are categorized as vocabulary, fundamental lexicology, idioms, repetitive, verbs of stories for enlightening Amasya culture. Afterwards, these language structures are explained considering Amasya Culture

As a result of investigation, it is passed in Amasya legends that sainthoods such as Resul Dede, Seyh Sadi Baba; undefined people such as soldiers, villagers, women; sultans as Magnificent Suleyman; places such as village, mosque, Turkish bath, tomb; animals as deer, snake; virtues such as patience, miracle; worship as salah, fasting; objects such as stone, stick and it is established that each of these has own special functions in legends.

Keywords: Amasya, legend, vocabulary, culture

Academic discipline: Primary education
Paper ID : 63

**A Study on the Adequacy of the Activities in the 6th and 7th Year Social Studies
Coursebook in Terms of Imparting Desired Values**

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Values education is one of the most important concepts, which is needed today and which it is thought will be needed in the future as well. It is witnessed that many of our values that have survived until today are now either forgotten or even altogether lost due in part to popular culture. This could prove challenging for individuals who on the one hand continue to live within the same social order and on the other drift away from their own culture. Cultural corruption or cultural conflict could be examples of these challenges. The concept of values education has appeared so that such challenges can be done away with and the social values that have come down from past generations can be preserved and kept alive. This concept is based upon the teaching of certain values to individuals, helping them make decisions and behave in line with the values that they have learnt. In order to attain these targets, a series of acquisitions were integrated within the course books so that certain values could be imparted to the pupils. As is known, however, values are more permanently learnt through experience rather than reading or listening only. The easiest way to achieve this is to make learners do activities. Therefore, values are not only imparted through acquisitions but also activities, which are carefully studied.

The present study aims to investigate whether the 6th and 7th year Social Studies activities are adequate in imparting the values that are to be directly taught. In this context, the activities in the 6th and 7th year Social Studies course books were studied in terms of their adequacy in imparting the desired values. This study will contribute to the literature in this regard. The study made use of document analysis, one of the qualitative research methods. The study concludes that the activities for the two class groups are not fully adequate in imparting the desired values. Values-based activities do exist for both class groups but not in sufficient numbers – which has resulted in highlighting the desired acquisitions rather than the desired values. Apart from the activities in the two course books, an effort was made to render the pupils more active through a set of explanations. However, as these explanations do not appear in the students' books, they were not included in the analysis in terms of the imparting of values.

Another aspect of the activities that strikes is that they are mainly paper-based and confined to classroom use. The constructivist system, however, is one that involves out-of-class activities and requires the learner to actually implement these activities. This is one of the most important factors in making the learning of values more permanent. Therefore, the activities should be so designed as to make the learners more active in the process, and complemented by more out-of-class activities. As values mostly have an interpersonal dimension, drama and role-play could be suggested as appropriate techniques allowing learners to engage in



interaction. Some of the activities would have been better if presented in the activity book rather than as part of the explanations. It is well known that individuals are more permanently influenced by what they see and experience rather than by what they are told. For this reason, pupils need to be presented with concrete experiences as opposed to solely paper-based and oral activities. In this way, all that is learnt can have a more lasting impact on the pupils, who can in turn further internalize the values taught.

Keywords: Value, values education, adequacy, social studies, coursebook

Academic discipline:
Paper ID : 67

**The Level Evaluation of Elementary School English Teachers' Specific Field Skills by
the Teachers Corum Sample)**

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In this research it is aimed to evaluate the competences of primary school English teachers from the aspects of teachers. Ten English teachers who work in different primary and secondary schools in Mecitözü and Corum have been reached for the research. In the research one of the qualitative research methods, phenomenology has been used and there are ten English teachers. 7 in 10 teachers work in secondary schools and 3 of them work in primary schools. 8 of them are female and 2 are male teachers. The data used in the research collected in the spring term in 2015-2016 educational year and in the part of collecting, analysing and interpreting the data the qualitative research method has been used. It is considered to work properly on the criteria of the qualitative research. In selecting samples the criterion sampling method that is a sample with purpose has been used. As the data collection tool, semi-structured interviews which include 9 questions prepared for the teachers have been designed. NVIVO 10.0 programme has been used in analysing the data. According to the results of the interviews, specific field skills of teachers in elementary schools show differences. Some of them give importance to professional development but some don't contribute their professional development. Findings have been interpreted and discussed according to the related research results.

Keywords: Elementary School English Teachers', skills



Academic discipline: Visual literacy, astronomy, science education
Paper ID : 70

Models Usage in Teaching Astronomy and Visual Literacy

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Visuals are used for everywhere in our lives and frequently used in educational environments. Scientific visualizations used in the educational environments can be a picture or a diagram or a TV show etc. Like the others, models are scientific visuals which are used for science teaching and especially in teaching astronomical concepts. If we talk about a visual, we should think about how we understand or re-create or teach the visuals. Visual literacy is based on the idea that visuals can be “read”. In the light of the knowledge this study is aimed to present if there is a relation between models usage in teaching astronomy and visual literacy. The significance of the study is presenting connections between astronomy, models and visual literacy which it was not found in Turkish literature. For this purpose the goals stated in Turkish National Science Program for 3,4,5,6,7 and 8th classes about models in astronomy determined. And the goals was examined in the light of visual literacy. It is considered to visual literacy is important for understanding, analyzing and re-creating models which can be used for better science teaching and learning. It can be said that model usage in astronomy and visual literacy is connected.

Keywords: Visual literacy, astronomy, models, science education

Academic discipline:
Paper ID : 77

A Model Suggestion for STEM Aactivity Design within the Scope of the Curriculum

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STEM which can be used for educating students at every stages, has product and practice based activities at its basis and integrates different disciplines is a new educational approach used as an acronym for the words Science, Technology, Engineering, Mathematics.

Education must focus on the humanly fields such as creativity, critical thinking, collaborating and problem solving that can not be solved via machines or information technologies. But it is not quite possible to have the individuals acquire these abilities by using classical educational understanding. Therefore, it is crucially important developing well-structured STEM activities and the individual's making mistakes by getting into incorrect directions during the education process, achieving the solutions by using trial-error method and via his/her own cognitive and operational processes. In the STEM field, attempts by partially public and by partially private sector are encountered in our country. But unfortunately, it can not be possible to correspond the STEM activities that are prepared for considering the curriculum of different countries with the curriculum applied in our country exactly. Putting forward the processes that are structured considering the curriculum and inside the process the students' using their humanly abilities in developing STEM activities are such as to form the basis of the studies that are made in the field of STEM in our country.

In this study, it is tried to design a well-structured STEM activity by examining the curriculum of Maths, Science Technologies, Information Technologies and Software courses and a sample STEM activity designing process has been developed.

Keywords: STEM, the curriculum, activity



Academic discipline: Education
Paper ID : 81

Does Gender Matter on Social Media: A case study on Facebook among English-Prep students

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Facebook is social networking website which has become the most popular website among others, with over 1 billion active users. Along with economic globalization and the rapid growth in international contacts, this growing communicative technology has become an inevitable part in all spheres of our daily life. It is not only a tool that allows us to transfer information at an astonishing speed and provide instant communication but also an agent potentially to change the flow of lives. In spite of a number of studies on people's attitude towards social networks and online applications, there is little interest in gender use in this matter. There are even contradictory reports favoring males and females in the use of information technology and social media. This paper seeks to answer whether there is any significant difference between male and female university students in the use of Facebook.

Keywords: Social network, gender

Academic discipline:
Paper ID : 82

Virtual Learning Environments (VLE) and Virtual Classrooms: Edmodo

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In our present day, language teaching should not be limited to classroom environments. Learners should be provided with real and authentic language learning environments where they can learn language whenever they want. Therefore, this brings a lifelong learning process. In this sense, the 2nd – 8th Grades English Curriculum (MEB-TTKB, 2014) encourages the integration of technology in all aspects of English language teaching and learning because technological tools match the dynamic and interactive nature of the language as well as the learners' interests and real -life experiences. In addition, fostering learner autonomy is any other important principle adopted in this new English curriculum. Authentic assessment tools and techniques are also included in the new 9th -12th grades English programs. Throughout the curriculum, in line with the alternative assessment principles, learners are asked to show what they can do and produce rather than what they are able to recall and reproduce (Huerta-Macias, 2002). Language learning should go beyond the walls of the classrooms and it should also take place everywhere. Depending upon the outcomes of the curriculum, one of the most effective ways for achieving this goal is the use of “virtual learning environments (VLEs)” to continue language teaching and learning outside classrooms. The aim of this presentation is to explain how VLEs and virtual classrooms can be used to achieve the outcomes of the curriculum. Edmodo, a web 2.0 software, is one of the examples of VLEs and social networking platforms that provides a free access and application via PCs, tablets and Mobile devices. Edmodo was applied at Samsun 19 May University, ELT Dept. at “Teaching English to Young Learners” and “Teaching Language Skills” courses by the researcher. Students had taken part in different applications of Edmodo not only in classes but also at their houses. Its mobile device application provides easiness to the students to follow their courses and assignments and give feedback. Edmodo also gives a chance to the language teachers to share different information to the students and check their assignments as an authentic assessment technique. Most of the students have stated that Edmodo is a really effective language teaching / learning software and it gives them an opportunity to compensate, review and recycle the courses.

Keywords: Virtual learning environments, edmodo, lifelong learning, e-learning



Academic discipline:
Paper ID : 83

MALL and Augmented Reality

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The use of mobile technology at anytime and anywhere by learners makes it a very important component of language learning. The rapid progress of Mobile Assisted Language Learning (MALL) has also brought visible changes in foreign language learners' attitudes towards language learning (Kukulska-Hulme, 2009). MALL offers great potential for language teachers to support practice beyond the classroom to encourage anytime-anywhere learning and to facilitate situated learning. On the other hand, Augmented Reality (AR) is a kind of computer-generated reality that intent to duplicate the world's atmosphere in a computer system. Augmented Reality helps teachers to add digital contents with lot of information as well as geographic locations about a place or object. Digital information appears on the screen when you scan any object or place using your tablet, phone or smart devices with AR technology. This digital information is gathered from 3D models, various website, video, etc. The aim of this paper is to explain how mobile technologies and devices can be used via AR to improve young learners' language skills in an interesting, motivating and challenging way. Examples will be given from the application of AR at ELT Department, Teaching English to Young Learners Course in 2015-2016. From this some practical implications will be drawn for language teaching and some suggestions will be offered for other teachers who may wish to use AR or other mobile learning activities with their students.

Keywords: Mobile assisted language learning, augmented reality, young learners, technology

Identifying Needs of Teachers Related to Local Curriculum

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This study is concerned with decentralization of enacted life sciences curriculum. Differentiating needs of different regions and even schools may cause some problems in the implementation phase of curriculum. Especially, the support for students with different socio-cultural and economic backgrounds and with special needs is the main issue in the name of flexibility in the enacted curriculum.

The significance of the study is to investigate needs of teachers as real actors of enacted curriculum. Furthermore, by this research a hot topic would be created to consider actions where the needs are occurred. As for decision-making processes, authorities for curriculum development would take consideration of the results of the needs analysis.

The purpose of this study is to analyse teachers' needs related to decentralization of enacted life sciences curriculum. The scope of needs analysis is 1st, 2nd and 3rd grade class teachers in Samsun, Life Sciences Curriculum-2015 and needs analysis questionnaire.

The study was conducted in 2015-2016 in Samsun. Quantitative data collection method is used to identify needs of teachers. The researchers developed data collection tool. While developing the data collection tool, the first stage of Tyler's curriculum development model is used as a theoretic lens. Hence, There are 3 categories such as needs related with sources of student, society and subject matter. Discrepancy model is used to identify the gap between what it is and what should be. Additionally, the importance of the gap for the success of curriculum is also placed to figure out the difference between need and want.

Reliability and validity issues are concerned during development process. Related literature formed the needs index statements. 2 different expert opinions are gathered to revise the questionnaire and a pilot study has conducted for reliability and validity issues. Needs analysis questionnaire includes 23 items and 7 of them are related with source of students, 7 of them are related with source of subject matter and lastly 9 items are related with source of society.

As to sampling method of this study, there are two stages in the sampling. Once, schools are decided according to maximum variation method among purposive sampling methods. Different socio-economic status of school area was the main variable. The second step is deciding participants. Convenience sampling method was used to gather volunteer teachers to participate. As a result, needs analysis questionnaire was administered 109 teachers in 16 schools.

According to the results of quantitative data analysis, source of students in needs analysis revealed that teachers need support for students with different socio-cultural backgrounds and with special needs. Society source in needs analysis unveiled that teachers need local curriculum to reflect country's culture, support to get benefit of local natural sources and to reinforce the adaptation of students to the local area. Lastly, needs related to content source of



curriculum development disclosed that teachers need more flexibility in designing content and calendar according to differentiating needs of students.

To conclude, since there were no need indexes below 0, all statements seem to be relevant for potential needs of teachers for decentralization of enacted life sciences curriculum. It can be stated that teachers' needs are focusing on more their agency, flexibility and authority in curriculum implementation and organization.

Keywords: Local curriculum needs analysis, decentralization, life sciences curriculum

**Impact of Science Lessons Carried Out in Out-Of-School Environments on
Students' Attitudes**

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This research aims to study impacts of the teaching method - supported in out-of-school environments – of the unit of “Let’s Solve Puzzle of Our Body” on students’ attitude toward science. The aforesaid unit takes part in teaching curriculum of Fifth Grade Science Lesson of Middle School. When the literature is studied, there is no any research about this unit regarding the impacts of science lessons supported with out-of-school environments on students’ attitude. Therefore, this research is thought to contribute into the literature in this respect. In the research, the pre-test - post-test equalized control group model, which is one of quasi-experimental methods, has been used. The experimental group of the study includes 15 students, whereas there are 16 students in control group. The groups were determined through random sample. Before and after the research, the “Primary School Fifth Grade Science and Technology Attitude Scale” developed by Yaşar and Anagün (2008) has been used in both experimental and control groups. The students in the experimental group studied the unit with current program as well as activities in out-of-school environments. In control group, the students just studied the lessons at the current program, without having additional activities. A t-test was performed for pre-test independent samples, whereas the post-test was carried out through covariance analysis (ANCOVA). At the end of the research, there was not a significant difference between pre-test ($t_{29} = .646, p < .05$) and post-test ($F(1-28) = .05, p < .05$) points. It is thought that the reasons such as the pre-test scores being high and the application being limited to just a unit had impact on failing to find a significant difference on the attitude scores. And, it is thought that carrying out research on different grades from now on and out-of-school environment activities which will include more units might impact students’ attitude toward science.

Keywords: Science, attitude, out of school environments



Academic discipline: Guidance and counseling& educational administration supervision
planning and economics

Paper ID : 101

Relationship between University Students' Psychological Well-Being and Smartphone Usage

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With the rapid development of technology, the use of smartphones has become remarkably widespread among young people. Smartphone usage speeds up lots of work in everyday life and facilitates human life. However, with changing lifestyles of individuals, smartphone usage seems to damage emotional and social relationships and thus adversely affect individuals' levels of psychological well-being.

This study was carried out to examine the effect of smartphone usage on young people's levels of psychological well-being.

The study group consists of a total of 408 students (303 female and 105 male) selected by random sampling method and studying at the departments of Primary Education, Science Teaching, Art and Crafts Teaching, French Teaching, and Guidance and Psychological Counseling at the Faculty of Education, Ondokuz Mayıs University in the 2015-2016 academic year.

Keywords: Smartphone, cell phone, psychological well-being, and university students

Active Learning in the Classroom: An Example from Harvard University

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In general, traditional method of teaching leads to memorize algorithms and equations without using thinking skills and core understanding of the underlying concepts. On the other hand, active learning strategies provide more student-student and student-instructor interactions than traditional format lecturing (Meltzer & Manivannan, 2002). Mazur has explored new methods and approaches to involve students actively in his classes since 1991 (Mazur, 1997). He incorporates effective pedagogies both in the classroom and in the students' preparation. This study aims to describe his classroom design based on active learning strategies in the context of an introductory level science & engineering course at Harvard University.

Course named as Applied Physics 50 is given as two parts (AP50a and AP50b) in fall and spring terms. Enrollment limit of the course is 70 students in each semester. There are two class meetings with three hours in a week. Apart from these, no laboratory and additional sections in this course. Course doesn't have lectures and examinations. It is enriched with different classroom activities to improve active learning. Thus, every pieces of the course has a role to involve students actively. Some strategies for implementing active learning are given following:

Just in time teaching: It is related to pre-class activities. Before coming to class, students are responsible to do weekly reading assignments and annotations the textbook. This system is called as NB and developed at MIT. Students discuss and ask their questions to their classmates and instructors.

Project-based learning: Students are expected to design three long term projects in one semester. Students work with three or four classmates. Teams change for in each project. At the beginning, they receive a project brief as a guidance. After the preparation, each team prepares a report and presents projects in the project fair. Students also conduct some experiments by taking measurements and analyzing data in the class. These experimental design activities help to develop students' skills.

Team-based learning: Students study into the teams during the classroom activities. They sit close together around a round table to communicate easily. As one of the class activities, students work with their team on a worksheet to complete tutorials. It helps to address common misconceptions on the subject. Students also discuss with teaching staff to eliminate misconceptions. **Peer Instruction:** It is known as an interactive teaching methodology developed by Eric Mazur in 1991 (Mazur, 1997). Peer Instruction provides students to discuss and learn concepts from each other. In the Learning Catalytics (LC) and Readiness Assurance (RAA) activities, students receive questions and response individually and then discuss problems in teams and answer again. LC is an electronic response system developed at Harvard University. Students' performances are recorded in the system.

Problem-based learning: In-class activities mainly focus on problem solving and higher order



thinking skills. Students work problem sets alone before the class. They apply problem solving steps for all five problem sets during the semester. In the class time they discuss with their team members to check, correct and improve their works. Then they make reflection at the end of the activity. To improve the performance on problem sets, estimation activities are implemented to the class. Students should guess the unknown quantities individually at the first five minutes and then discuss and solve as team in 30 minutes. At the end of the term, students' grades are given by considering their overall performance. Continuous assessment is important for the final evaluation. After each project students get cumulative feedback to see their performance. In addition, students receive team assessment survey at the end of each project. It includes self, peer and overall team assessment. As a point, preparing this type of interactive lectures gives some responsibility both instructors and students. Course format should be explained clearly to the students. There should be some control mechanism to check students' preparations before and after the class. Instructors should select properly immediate feedback methods (low-tech, e.g. flashcards or high-tech, e.g. clickers) depending on their facilities and students' profiles.

Keywords: Active learning, course design, learning strategies, continuous assessment

Academic discipline:
Paper ID : 106

Examination of Various Variables Affecting Social Skill Levels of Secondary School Students

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To lead a happy, successful, productive life and for proper process of social life, individuals should behave in a way suitable for their social standing and their environment. Individuals should have a number of social skills to behave in this way. Social skills are important features for people to initiate, maintain positive interactions and communicate with others. Defined as the skill for behaving appropriate to the environment, social skills are effective for establishing interpersonal communication and socialization of the individual. Individuals with strong social skill are people who know how to make their selections, how to behave in different conditions, with strong communication skills, can proceed successfully in their social lives, possessing leadership features. Individuals with strong social skill levels are at peace with their lives as well as they can maintain their relationships with their social environments and access to their goals easily. Individuals with weak social skill levels have difficulty in obeying social norms, complying with social life, undertaking social responsibilities and interpersonal effective communication. So, some problems appear both in the individual's own life and his/her social environment.

Social skills are learnable, gainable and developable behaviors. So, children should be provided for social skill training from their early ages. While this training is being provided, knowing factors affecting their social skill levels is important in terms of effectiveness of this training. If reasons of differences between social skill levels of students can be truly understood and evaluated, students can gain social skills more easily. The purpose of this research is to examine variables which are thought as effective on social skill levels of secondary school students. In this research, the descriptive survey model was used. In order to determine social skill levels of students, Matson Evaluation of Social Skills with Youngsters which was adapted to Turkish by Bacanlı and Erdoğan (2003) was used. The study group of the research comprises of totally 1088 secondary school students studying at 2015-2016 school year. The most distinct feature of students taken in sample is that they are secondary school students studying in state schools and private schools and are secondary school students under protection and care. In order to compare social skill levels of these students, the maximum variation sampling method from purposeful sampling methods was used. In the research, statistical analyses were made by using SPSS (Statistical Package for Social Science for Personal Computers) program. In the research, t-test for irrelevant (independent) samplings; and one-way variance analysis (ANOVA) for irrelevant samplings were used. As a result of the research, it was found that various variables affect social skill levels of students. According to this, it is determined that social skill levels of students are higher, they have more positive social behaviors, and have less negative social behaviors at the



first group when compared female students with male students, successful students with unsuccessful students, students spending time with their friends with students spending time alone, students solving problems with their friends by talking with students solving them by quarrelling aloud and fighting, students liking the school with students liking a little or not liking the school, students reading books very often with students reading no books and reading books sometimes, students with high grade level at social knowledge course with students with low grade level. Another result of the research is that the higher the class level, the higher the social skill level, but there is a decrease in social skill levels at students of 8th class. These results show us that there are several number of variables effective on social skills of students. Being known of these variables by all partners responsible for training of students will be beneficial for development of social skills of students.

Keywords: Social skill, secondary school, social studies, positive social behavior

Academic discipline:
Paper ID : 107

Locus of Control and Social Skill Relationship in Secondary School Students

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The individual is a biological asset as well as a social being. In order to develop its social being healthfully, the individual needs to know its social environment, live in compliance with it and interact continuously. This requires some social skills. Being a learning product, social skills should be brought in children from their early ages, for this purpose, social skill trainings should be provided for them. The lesson of social studies is the first lesson that will bring social skills and provide social skill training in primary school and secondary school. While providing this training, firstly, variables that will be effective on social skills of children should be determined. One of these variables is the locus of control, the subject of this research. Locus of control is a concept stating the person's degree of bearing responsibilities of results of his/her own behaviors or cases happening in his/her environment. This concept, firstly defined by Rotter (1966) has two directions as internal locus of control and external locus of control. While internal locus of control states person's belief on effectiveness of his/her own skills and decisions while evaluating cases and results of these cases; external locus of control states the belief of effectiveness of others' powers for these cases and results. Yeşilyaprak (1988) states that individuals with internal locus of control are more social, more active and more effective participants in political and social cases. Individuals with external locus of control have more negative personality characteristics than individuals with internal locus of control. These people are passive people believing that they have no control over environment (Çoban and Hamamcı, 2006). In this research, it is thought that the locus of control is connected with the social skill. So, it is assumed that people with developed social skills are internally controlled while people with weak social skills are externally controlled. Therefore, the aim of this research is to find out relation between social skill levels of secondary school students and their locus of control. The screening model from quantitative surveying methods was used in the research. The study group of the research comprises of totally 1088 secondary school students studying at 2015-2016 school year. In order to determine locus of control of students, the "Locus of Control" scale, developed by Nowicki & Strickland (1973) and adapted to Turkish by Korkut (1986); in order to determine their social skill levels, the "Matson Evaluation of Social Skills with Youngsters" scale which was adapted to Turkish by Bacanlı and Erdoğan (2003) were used. SPSS 15 package program was used for analysis of obtained data. The basic correlation and regression analysis was used for determination of relation between the locus of control and social skill. At the end of the research, it was found that there is a relation between the locus of control and social skill and this predicts social skills meaningfully. According to this, it can be said that social skills of students with internal locus of control are better than ones with external locus of control. So, the lesson of social studies, one of lessons that may be mostly effective on development of social skills of students in primary and secondary schools should have characteristic that will strengthen internal locus of control of students and for teachers who are practitioners of this lesson should prepare activities that will develop internal locus of control of students while creating learning environments.



Keywords: Locus of control, social skills, secondary school, social studies

Academic discipline:
Paper ID : 108

**The Effect of Problem Based Learning on Students' Achievements, Attitudes towards
Problem Solving and Their Motivation towards Science in Science Education**

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In recent years, with incorporating constructivism into the education system, educational basic dynamics turns into student centered teaching approaches. The constructivist approach has an important place and impact in current science education. When we look back at the past 20 years, student-centered learning, collaborative learning, and project-based learning are current trend learning in education system. One of the reformists learning system is project-based learning. Şenocak and Taşkesenligil (2005) state that none of the approaches in science education have made the same impact as problem-based learning thus far. With the problem based learning method, students solve the problems and gain some experiences and apply the knowledge that they learned in class. (Hmeleo- Silver, 2004). Many studies conclude that the problem-based learning approach can be implemented in science education and it can be very effective as well.

This study has been conducted to measure the problem-based learning approach's impact on students attitudes and their motivation towards science class with, "Let's solve our Body's Puzzle" unit in science class with 6th grade students.

This study was conducted in the 2013-2014 school year. This study took place with 42 6th grade students in the center of Antalya. The data from this study has been collected before and after this study with certain measurement tools. In order to collect data from this study, the students were given pre-tests and post-tests before and after the experiment with tests such as, "Let's solve our Body's Puzzle Unit Accomplishment Test" "Attitude Scale towards Problem Based Learning" and "Motivation Scale toward Science"

Quantitative data from this study was analyzed using the SPSS 23.00 program. In order to see the relevance of data from this study on normal distribution, the Shapiro-Wilk test was utilized. Comparison of pre and post-test results of control group and independent variable were analyzed through an independent exemplary t-test. In order to see students' scores within the group, we utilized a dependent exemplary t-test. The pretest was conducted to understand whether there was a significant difference between control groups. To see the difference between control groups covariance analysis was conducted and average scores were found.

During this study, it was measured that students' achievement scores was way better compared to the control group with problem-based learning method. Based off this study, we can say that problem based learning method is more effective than traditional learning method on student achievements. (Akinoğlu ve Tandoğan, 2007; Gordon, Rogers, Comfort, Gavula ve



Megee, 2001; Göğüş, 2013; Polanco, Calderon ve Delgado, 2004; Tüysüz, Aktaş ve Elbistanlı, 2015)

In this study, the independent variable group with problem based learning teaching method versus another control group with existing teaching method was compared and it was understood that the independent variable group with the problem based learning method has better advantage versus the existing method. Therefore, the problem based learning approach increased students' motivation towards problem solving compared to a pre-existing traditional method. (Büyükdokumacı, 2012; Karataş,2008)

When students' motivation toward science with base factors was analyzed, it turned out that there is a significant difference statistically between control group and independent variable about research motivation and collaborative motivation. However a significant difference in base factors of control and independent groups, between motivation toward science, motivation to perform, motivation to communication and motivation to participation was not observed. With that said, it was revealed the fact that with problem based learning approach was a great approach to increase students' motivation toward science. Leung and Wang (2008) stated that students are at the center of learning and also they encourage themselves towards learning with problem based learning. With this study's research and practices, it offered some suggestions to new studies in the future.

Keywords: Science education, problem based learning, academic achievement, attitudes towards problem solving, motivation towards science

Academic discipline: Waste materials, environment, soil, contaminate of water, radioactive substances

Paper ID : 109

The effects of Waste Materials to Environmental Education

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The researchers have studied the topic and solution of the collection and storing of waste Materials that is important for preventing of mixing the waste substances with underground water for along time. Every society has waste materials as much as consume thier needs. Nowadays the waste materials formed huge problems for the people. However there are many kindes of the waste materials . The most important is the heavy metals and waste of radioactive substances. So the collection , transportation and storing of the waste materials work needs to high experience and high technology. Besides these factors, the factor of safety should be taken especialy the out of these waste release Methan Gas. For recent years , these process have gained inportance for environment researchers. This kind of the problems have become more effective in the industrial countries. This study gives the informations about the solution of isolation of the region of waste from the undergroundwater to contaminate of water supply by heating the soil of ground till 500 ° to form isolation of layers of ground. Finally this study may help the society to protect the people from contaminating water, which is very important for the health of the people . The recomendations and conclusions are given.

Keywords: Waste materials, environment , soil, contaminate of water, radioactive substances



Academic discipline:
Paper ID : 110

The Importance of Natural Materilas in Civilization and the Protection of Old Historical Buildings

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Istanbul is very rich with historical buldings which reflect the culture of very old civilization in the world. So the protection is impotant duty of each architect and engineer. This will be the impotrانت trace for our future and culture.

The end of architecture is to build well. Well building has three conditions : commodities, firmness and delight. These three conditions are timeless : commodity : the arrangement of plan unites to satisfy the social requirement ; firmness : the disposition of structure to give shelter and stability ; delight : the ability of combining firmness and commodity to give visual and sensual pleasure. At beginning of life on this globe the separation between human and beast was comparatively slight , and men and women lived in conditions similar to the animals. But a primitive desire for shelter soon arose caves probably formed earliest homes. Then the use of wood was discovered together with methods of cutting it. This led to primitive tent from in which boughs were leant against each other, bound at the apex and covered with brush and moss to keep out the weather . Later a simple post and lintel system was evolved by making use of natural materials . The Egyptian with their early civilization took this post and lintel stage further by discovery of new materials – stone and , to lesser and less successful extent, mud bricks . The factor of the natural materials like stone and bricks played very important role in to construct huge building like temples and prides which could resist all external effects and could be stood till these days . The aim of this research to declare how they could do construct these buildings without falling even exposed to earthquakes in the past.

Keywords: Mud bricks, architecture, well building, civilization, culture

The Problems Experienced By Science Teachers While Conducting Activities in Laboratory and Their Solutions

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In this paper, it is investigated that the teachers' views about the problems while conducting activities in laboratory and their solutions. Researches show that using laboratories make positive contribution to students' success and attitudes but they are not widely used. It is necessary to create a laboratory of science where they live in, touch, feel and put into practice their observations in order to arouse curiosity of students, to increase their motivations by learning easily and to comprehend the science and technology better which help us to understand the nature and natural events (Güneş, et al. 2013). Although there are laboratories in schools, laboratory activities are not sufficiently carried out. These results are obtained from the problems that many teachers complained during the application process. As there isn't a qualitative research about the problems experienced by the teachers during lab activities, this study is expected to contribute to investigate the problems of teachers thoroughly.

In this context, the aim of this research is to get the views of teachers about the problems while carrying out activities in laboratory and their solutions. Phenomenological design is used in this research. Phenomenology focuses on cases that we are aware of but don't have comprehension deeply or elaborately. In phenomenology researches, the case sources are individuals or groups who experience the case and act out or may reflect the case focused on by the research (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2013). In this research, criteria based sampling method was used. The criteria in the sample is using the lab activities during teaching and the experience of teachers at least ten years. The research was carried on with five science and technology teacher working in Amasya city center. For the data collection tool interview forms with five questions were used. The obtained data were analysed related to the content analysis method by using NVivo 9 qualitative analysis programme.

According to research finding, teachers use inductive, deductive, group and demonstration methods in laboratory activities. It is important for the teachers to present the lesson with which teaching methods and techniques in order to make the lessons effective for students as science education needs to be improved in terms of the content, syllabus rather than the name of the lesson at the end of the development process of science education in our country. It is seen that the main problems result from lack of lesson periods, security precautions, labs, equipments, previous knowledge about activities, the over-crowded classes and not reaching to experiment results. The classroom atmosphere and equipments should catch students' attention. Unless the attention of students is caught, students will canalize other objects. That makes difficult to catching students' attention. After interviews, none of the teachers said that he/she was ineligible for laboratory activities. Teachers stated that the most permanent learning and concentration about benefits of laboratories. One of the problems faced by



teachers in laboratory activities is lack of equipments. In Güneş (2013)'s research, it is identified that teachers can not carry out many experiments in schools because of lack of equipments and laboratories, the teachers who can't carry out experiments by using simple equipments taken by them or give lessons with models. Overcrowded classrooms and shortness of lesson periods are also the problems experienced by teachers during laboratory activities. If self experiments can not be done due to the fact that there aren't enough labs, materials in schools, demonstrative experiments should be done. Teachers think that improprness of students' prior knowledge, not following or making deduction from experiments cause troubles in laboratory practices. The activities that are proper for readiness and characteristics of students and physical conditions should be planned before the lessons while preparing laboratory activities. Otherwise, these activities may be seen as time consuming. Teachers complained that lack of security precautions while conducting laboratory activities and overcrowded classrooms. It is seen that science lessons in primary and secondary school are deprived of laboratories and the stated reason is overcrowded classrooms. It is thought that principals have difficulties in finding physical environment for laboratories due to the high student population, however, even if necessary conditions are provided, laboratories and equipments aren't used or equipments are waited and kept in stores (Akdemir, 2006). If teachers' problems during laboratory activities are solved, permanent learning will be ensured by providing students' experimental learning. Precautions taken during laboratory activities by teachers are providing proper learning and teaching environmet, planning activities before the lessons, providing teachers' control, getting missing materials before the lessons, making activities understandable, teaching the rules of laboratory to students. Laboratory activities should be placed for efficient science education in schools. So, it is necessary that teacher's approaches to experiments and laboratories are positive, they participate the activities voluntarily. Teachers should be supported by principals about lack of equipments. Also, it can be created backdrops for experiments by reducing classroom sizes.

Keywords: Science teaching, laboratory activities, teachers' views

Academic discipline:
Paper ID : 116

The Use of Digital Storytelling in Elementary Math Teacher Education

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The history of stories is as old as human race. Stories were always a part of formal and informal teaching since the beginning of history. While elders told stories to youngsters in order to share their knowledge and experience, teachers used stories in order to teach more complicated topics in an easier and fun way. Along with the advancements in technology, the way of storytelling has evolved to digital storytelling. Digital storytelling could be defined as short multimedia stories told by the hero of the story by heart, or shortly telling stories via computers. The purpose of this study was to investigate the use and effects of digital storytelling in elementary math teacher education. The data of the study were collected from 48 junior elementary math education teacher candidates as a part of computer applications in education course in spring semester of 2015-2016 academic year. In this manner, some examples and non-examples were presented and the ways of using digital stories in education were taught at first. Then, several digital storytelling tools, advantages and limitations of each tool were introduced to students. Afterwards, students were asked to form groups consisted of two or three people. Each group was given a two-weeks period to decide their topics related with elementary math education curricula, get approval from the instructor, and write their stories. Groups with approved topic and story were given a week to prepare their storyboards. Lastly, all groups were given a month to prepare their digital stories. During the whole process, each group got feedback from the instructors related with their stories, storyboards, and digital storytelling tools. At the end of the semester, all 18 groups presented their digital story to their classmates, and each story was evaluated by classmates via a likert-type digital storytelling scale. There were 48 students from total of 18 groups. Furthermore, qualitative data of the study were collected via semi-structured interviews conducted after within the few days of the presentations in order to ensure that students remember other groups' digital stories. Each interview was lasted around 15 minutes that students were asked about their topic, reasons of choosing that topic, the design and development process of their digital stories, the tool they used to prepare their digital stories, the reasons of choosing that tool, the advantages of learning to prepare digital stories, their opinions on keep going on this assignment in forthcoming years, and their suggestions. Each interview was transcribed and then analyzed by two of the researchers. Based on the preliminary analysis, students selected the topic mostly based on the easiness of teaching or transferring the topic into a story. Besides, they selected the topics difficult to learn, or that they experienced problems while



learning in elementary school. The most common tool for creating a digital story was “Goanimate” among all groups. The most common reasons of choosing Goanimate were being easy to use, design, characters and visuals of the program. When students were asked the benefits of the process of learning to prepare digital stories, they stated that the most important benefits were learning to teach, and learning a new tool that they can use when they become teachers. Furthermore, all students stated that they liked the application, and they think that it is beneficial and keeps going on for forthcoming years. Lastly, when students were asked the best digital story, the most common one was the “measurement units” although various digital stories were mentioned. The reasons of mentioning a digital story as successful might be listed as from most common to common as the storyline and the flow of the story, music and voiceover, fun, and the relationship with daily life.

Keywords: Digital storytelling, elementary math education, elementary math teacher education

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Academic discipline:
Paper ID : 128

Science Teacher Candidates' Thoughts on Simulation Supported Stem Activities

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STEM is an education that gathers science, technology, mathematics and engineering disciplines and makes an integrated program out of them. STEM education mostly focuses on science and mathematics disciplines yet it also covers technology and engineering fields (Bybee, 2010). The aim of such education is to achieve learning with an integrative approach by the help of interdisciplinary studies (Smith & Karr-Kidwell, 2000). In other words, STEM education aims to integrate these fields' context and possible real life problems.

STEM education arouses interest in countries that want to raise a generation capable of innovation (Bybee, 2010). Our country's 2023 vision and Ministry of National Education's strategic documents' goals prove that science and technology, engineering and mathematics education has to be defined within our country (Çorlu, Adıgüzel, Ayar, Çorlu & Özel, 2012). In order to achieve that, teachers should be equipped with contemporary education. To raise individuals who are expert at STEM fields will only be possible by the help of teachers. From this viewpoint, in this study it is aimed to see science teacher candidates' thoughts on simulation supported STEM activities. This study's working group comprised of 31 teacher candidates of 2015-2016 Spring Term 3th year undergraduate students of Kırıkkale University Department of Science Education.

It is a qualitative research as teacher candidates' perception is analyzed in an integrated way. In this context, teacher candidates tried to make sense, interpret and categorize their thoughts on STEM activities and education. Obtained raw data were evaluated using content analysis. This analysis is defined by codes dependent on specific codes and a systematic and replicable technique that is summarized by a text's some words smaller content categories (Büyüköztürk et al., 2008).

Reporting the collected data in details and explaining how the researcher concludes their results are some of the important criteria of credibility for a qualitative research (Yıldırım & Şimşek, 2011). So as to secure the credibility of the survey, the collected data is compared within the categories that are formed independently from each other by the two researchers in order to decide if it represents the mentioned categories and the consistency of the categories that are formed by the researchers is determined by stating the number of consensus and dissensus. As for the credibility of data analysis, it is calculated by using the formula of Miles and Huberman ($Credibility = \frac{Consensus}{Consensus + Dissensus} * 100$) and the result is 92%.



Teacher candidates' thoughts on simulation supported STEM activities were interpreted by the help of some determined codes under four main themes: skill developments, learning effects, the use of simulation and problems. Evaluating the answers provided by teacher candidates, STEM activities in the class are seen to be effective. It is stated that STEM activities and the target skills of Turkish National Education's vision are effective in developing skills of 21st century scientific process skills. Furthermore, teacher candidates state that they have a positive attitude towards using STEM activities in their classes. It was determined that the simulation used in STEM activities provided positive effects on engineering design and creating products and also had advantage about determination of design material and inaccuracy.

Keywords: STEM education, computer simulation, engineering applications, science education

Academic discipline:
Paper ID : 129

6th Graders' Thoughts on Stem Activities

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STEM is a statement that covers high order thinking, gathers science, technology, engineering and mathematics, and leads to effective learning making the use of theoretical information feasible in the daily life. Along with research, design, problem solving, teamwork and effective communication skills, STEM focuses on the specific learning and producing activities; instead of different disciplines being learned independently. STEM education's aim is to achieve learning with an integrative approach by the help of interdisciplinary studies. STEM education –that supports integration of information and skills of science, technology, engineering and mathematics in science education- aims to raise individuals who are open to communicate, can think systematically, are creative, have moral values and can find best solutions for problems; by providing them with an engineering-like education that makes use of different disciplines (Bybee, 2010; Dugger, 2010; Guzey, Tahnk, Wang, Roehrig & Moore, 2014; Rogers & Porstmore, 2004).

In the present curriculum, disciplines such as science, mathematics and technology are separate classes. On the other hand, engineering is never included in the curriculum. From this point of departure, in this study, we aim to reveal the students' thoughts on STEM activities, which is carried on with secondary school students. A sample study was conducted in Final Schools' Kırıkkale branch, with twenty 6th grade students. The study was conducted as a qualitative research. In a qualitative research, methods like observation, interview and document analysis are used and by doing this we aimed to present perceptions and phenomenons realistically in a natural context. STEM engineering practices, developed in this point of view, were carried out with students, who were later on interviewed for their feedbacks.

The collected data is categorized by using content analysis technique. So as to secure the credibility of the survey, the collected data is compared within the categories that are formed independently from each other by the two researchers in order to decide if it represents the mentioned categories and the consistency of the categories that are formed by the researchers is determined by stating the number of consensus and dissensus. As for the credibility of data analysis, it is calculated by using the formula of Miles and Huberman and the result is 81%.



When we look at the answers given by the students, we can see that as a result of STEM Activity Implementations, 21st century skills such as handicraft, creativeness, problem solving and collaboration are improved. Also, we can see that they started to learn more effectively, especially in areas such as reinforcement of topics learned, providing the persistency of the information learned, learning by doing and experience, making learning easier, concretization of information and learning with fun. They reinforce the information they learned, they have a tendency and motivation to form engineering products in an entertaining course environment, they devise by playing an engineer's part, and they acquired innovations that will help them test their hypothesis with an interaction between different disciplines. It is found that the students grow a desire to solve problems and to help people. It is also found that they have difficulty in forming problem and hypothesis sentences, determining sub-problems and variables, decision making and forming engineering products and the period allocated for classes is inadequate.

Keywords: STEM education, engineering education, project-based learning, science education

Academic discipline:
Paper ID : 131

Determination of Secondary School Students' Multiple Intelligences and their Attitudes towards Computer (Samsun Yakakent Sample)

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Our age is the age of information and information changes all the time (Çelik, Kocaman and Önal, 2008). Changing information brings along changing and developing technology. Modern technology changes the structure of the society with brand new production, transportation and communication techniques it brings along and makes it necessary for every country to structurally adapt to this change (Akkoyunlu, 1996). With the renewed, changing and developing world, societies are expected to be information societies which learn and use technology and bring daily life and technology together. MEB 2492 numbered Journal of Papers (1998) defines information society as “a society that consists of individuals who seek for information, who can reach information, who can classify, store and assess the information they reach in the best way” (Karagöz, Yıldız and Özerçin, 2007).

One of the indispensable and almost the most important and the most indispensable tools of our age are computer and computer Technologies. Computers are accepted as one of the important elements in the lives of individuals of every age which were initially very big but reduced to small sizes today as a result of technological developments (Timur, Yılmaz and Timur, 2014). It is very important for individuals to learn basic computer information and to use this information in modern life in terms of raising awareness and guiding the future generations (Kılınç and Salman, 2006).

It is inevitable for computer and computer technologies, which have a very big significance in daily life and which are used at every moment of the day, to be used in educational environments. However, another problem to consider is how correctly and purposefully used the computers and computer technologies in these environments are. Thus, it is necessary to find out the levels of computer using skills of teachers or educators who are leaders of educational environments and students who are learners and to develop low level skills.

Each individual has different interests, perspectives, ways of thinking, etc. In fact, each individual is different from the others. Thus, the methods individuals use while trying to solve a problem, their ways of learning new information and even their intelligences are different from each other. While an individual tries to solve a problem by discussing with others, another one can solve a problem by making cause and effect relations or by finding a rhythmic way for himself. As a result, each individual with different fields of intelligences or individuals who have a field of intelligence more developed than other fields will solve problems in their own way. Based on this information, it is possible for individuals with different fields of intelligence to have differences in their computer using skills and their attitudes towards computer.

The objective of this study is to find out the more developed intelligences of secondary school students based on Howard Gardner's Multiple Intelligences Theory and to find out their attitudes towards computer.

While improving the computer skills of students whose different intelligences are developed or when their attitudes towards computer are assessed, more effective, more useful and more student oriented information can be given to students. When the students who have negative



attitudes towards computer or those who have poor computer using skills are educated properly, students' negative attitudes can change or their computer using skills can be improved. This study is important for finding out the attitudes of students towards computer, promoting positive attitude, developing computer using skills and contributing to literature on this subject.

In this study, the data will be collected by using questionnaires, which is one of the quantitative research methods. The sample of the study consists of 112 eighth grade students studying at secondary schools in Yakakent town of Samsun. The data will be collected by using "Multiple Intelligences Theory Assessment Scale" developed by Celal Gülşen (2015) and "Scale of Attitude toward Computer for Secondary and High School Students" adapted to Turkish by Demir and Yurdugül (2014). The data will be analyzed by using "One Way ANOVA". The results of this study will be discussed.

Keywords: Multiple intelligences theory, attitude toward computer, secondary school students

Academic discipline: Guidance and counseling
Paper ID : 134

Teacher Certificate Program Students' Occupational Anxiety Levels

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In Turkey, the need of trained teacher is met by two sources: faculties of education and pedagogical formation certificate programs. It has been expected that prospective teachers, who are one of the most important parts of education, have low occupational anxiety towards this profession. But prospective teacher's emotions and perceptions are changing so rapidly due to recent developments in technology as well as changes in social and economic structures of the societies. In that reason, teacher certificate program students' occupational anxiety is very important.

This research in general aims to determine the relationship between teacher candidates' occupational anxiety levels who are taking teacher certificate. This qualitative study used a descriptive survey model of data collection. Participants responded to a survey developed by the researchers and findings were presented descriptively. 500 teacher candidates participated in this study. The participants were enrolled in the teacher certificate program at the Faculty of Education at Ondokuz Mayıs University in the 2015-2016 academic years. The "Occupational Anxiety Scale for Prospective Teachers" was used as the data collection tools. For independent groups along with the descriptive statistics, inferential statistics like t-test, one way anova and scheffe test were used. The study illustrated that male students' occupational anxiety scores are higher than female students. The students' occupational anxieties that perceive as inadequate socio-economic level are higher than others.

That this research is carried out only in Ondokuz Mayıs University Faculty of Education is a limitation about generalization of results. In the future, it will be more useful to carry out similar research on larger sample groups which involve pedagogical formations programs in different universities.

Keywords: Occupational anxiety, teacher certificate program students, prospective teachers



Academic discipline:
Paper ID : 137

High School Teachers' Use of Information Technology Levels

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The development of information and communication technology , the increase in the speed of access to information and sharing of information each day has necessitated the use of communication technologies in the educational process . Therefore, in order to unify the technology and the education system with each other, substantial projects have been implemented in Turkey by the Ministry of Education for becoming an information society. In 1998, starting with Basic Education Program (BEP), in this process which consists of two phases, with the establishment of ICT (IT) classes in primary schools and the cooperation with different portals with Internet -assisted learning (skool.t the global gateway think.co etc .) and authorities tried to increase education quality. According to the findings, high school teachers were found inadequate or as moderate level with the percentage 52% of the use of data on the Internet , 10 % of them communicating via internet, 11% teach lessons through Internet, and 19% of them have never heard of the word blog. Piloted in 2010-2011, the Project "Opportunities to Increase and Technology Improvement Act " (Fatih) which was scheduled to provide internet access and laptops for 620,000 classrooms, aimed the provision of the hardware and software infrastructure, provision and management of educational e-content and provision of effective use of IT in the curriculum, provision of service training of teachers and provision of IT usage consciously, securely, in a manageable and measurable way. In this context, Education Information Network, (EBA) was established consisting from some programs such as e- courses, e-content programs , e- document and a structure schools were provided with whiteboards primarily at high schools , gradually secondary and primary schools, students and teachers were provided with laptops. Bringing together technology and student in education, teachers use communication sites defined as web 2.0, Wikipedi, social networks, sharing sites, tools like blogs electronic social interaction actively, ready-made website that they can interfere with the content of the system and are able to share information. Hence this research examined. high school teachers' use of mobile technology skills, web 2.0 tools , information and communication technologies. In this study which also investigates the effect of age and gender variants to information and communication technologies skills, it is important that teachers express their level of information technology, as a result of this, preparing the necessary in-service training programs for teachers in this direction. Singular and relational scanning models which are general scanning models were used in this study. Research universe consists of 297 teachers working at 10 schools , including 9 public and 1 private high schools within Education Directorate Merzifon in 2015-2016 academic year. The data in this research was obtained by "ICT Skills Scale" which depicts information and communication technology use of teachers and "Personal Information Form" which reveals web 2.0 tools use of teachers. Personal information form was developed by the researchers. The Information Technology Skill Scale which was developed by Wilkinson, Roberts While (2010) , the studies of adaptation, reliability, validity and translation of the scale into Turkish, was conducted by Haznedar (2012). The highest score was identified as 140 and the lowest score as 28 according to the the 5-Likert rating scale which Consists of 28 items. Cronbach alpha reliability value of this scale which is 0.93 was found as 0.94 alpha reliability for this research. P-value of .05 is smaller in the Kolmogorov-

Smirnov normality test which was conducted for data analysis so it was determined that distribution of data wasn't normal. Therefore, statistical data in this research was analyzed with frequency , percentage , average and Kruskal -Wallis and Mann-Whitney U test which are non-parametric tests. With the internet project signed with the Ministry of Education in 2008, , while providing Internet access to 95 % of high schools and the equivalents, " Intel Education Project for Future", initiated in 2001, aimed to use IT classess effectively by teachers. In this research, teachers' score was found as the lowest score of 48, the highest score was 140 according to the " ICT Skills Scale which describes teachers' use of information and communication technologies . According to the findings, information and communication skills' total average score of 3.85 in 5-Likert-type scale shows that teachers have a medium level of ability to use information technology. According to the survey results, it should not be ignored that although the studies for the use of technology in education are mandatory, product -based approach alone can create technological waste classrooms. For this reason, necessary measures should be taken to ensure the active use of web 2.0 tools in education for training programs.Key Words: Web 2.0 communication technology , information technology , internet , social networks , teacher.

Keywords: Web 2.0 communication technology, information technology, internet, social networks, teacher



Academic discipline: Education, mathematics education
Paper ID : 140

Examination of Vocational High School Students' Learning Approaches By Various Factors

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Problem Status

Recently science and technology keeps developing rapidly, students leave their passive structure in which they are accustomed to only receiving what is being taught to them and progress towards a new model which is active and encourages ways of dynamic learning. In line with these developments, it is focused much more on how individuals would learn than how something would be taught.

Learning approaches, a phrase that became one of the key concepts in discovery of learning methods lately, was first defined by Marton and Saljo in 1976 (Ak, 2008). Learning approaches is defined as students' preferred way of learning based on their perceptions on what is aimed to be taught to them (İlkörücü Göçmençelebi, 2014). Students' learning approaches are grouped as deep approach, superficial approach and strategic approach in literature. Deep approaches can be defined as search for meaning by conversion, while superficial approach can be defined as copying and strategic approach as the way of regulation. It is stated that same students would have different approaches towards different situations and their learning method would be affected by their way of perceiving the learning environment. If the student perceives the environment positively then it turns into deep approach, as the student would develop a superficial approach in the opposite situation where he would perceive negatively (Entwistle Peterson, trn. from 2004; İlkörücü Göçmençelebi, 2014).

Knowing learning approaches is perceived as important by means of students' self-discoveries on ways of obtaining knowledge and teachers' consideration of students' different approaches and recognizing them for imparting. Knowing the students' learning approaches is thought to be important since it avails to regulate the education environment and to learn the subject much more thoroughly (İlkörücü Göçmençelebi, 2014).

Importance of the study

Determination of the ways (ne yolu) of the assistant teachers who would likely join education sector as intermediate staff in the future is important both for teachers and the students they would address. A study on college students' learning approaches will both avail us to evaluate

the teaching process in college environment and deduce students' learning environments in the future.

The purpose of this study is to reveal the relationship between vocational high school students' deep and superficial learning strategies, their socio-demographic features and their academic performance.

The problems of the study are as follows:

Is there a significant relationship between students' learning approaches (deep approach, superficial approach, deep strategy, superficial strategy, deep motivation, superficial motivation) and their terminal general weighted average (GWA) grades?

Is there a significant relationship between students' learning strategies (DA, SA, DS, SS, DM, SM) and their socio-demographic features (age, number of siblings, which sibling they are, parents' educational status, parents' occupations, family's socio-economical status, settlement status, type of high school graduated and from which choice they made it to college)?

Method

The descriptive survey model, as one of the quantitative research approaches, was used in the study. descriptive survey model is a group of approaches that aims to describe a situation that existed in the past or still exists (Karasar, 2005).

The study was conducted during 2016-2016 fall semester, with 82 students continuing their education at Ordu University Fatsa Vocational High School Child Development Department.

Personal Information Form, which was prepared by the researchers to determine the participants' sociodemographic features, was used for data collection. Students' learning approaches were determined by using learning approaches scale which is first developed by Bigs (1987) and then translated to Turkish with a validity study by Batı, Tetik and Gürpınar (2010). Students' terminal WGAs were taken from university grade system, with permission of the students.

Data analysis was made with SPSS 23 software and the study was carried out with 95% confidence level. As nonparametric test methods Spearman correlation, Mann Whitney and Kruskal Wallis were used; while t and ANOVA tests were used as parametric test methods.



Conclusion

The results of the study showed that the students preferred deep and strategic learning methods over superficial method on significant level.

The students whose ages older than 20 were found out to have higher WGAs. And also a significant relation was found between WGA and Deep Motivation grade.

By terms of Superficial Approach and Superficial Motivation grades, a statistically meaningful difference exists between the settlement status groups. According to this relation, participants who are settled in their own houses have higher Superficial Approach and Superficial Motivation grades.

No significant relation was found between students' learning strategies (DA, SA, DS, SS, DM, SM) and sociodemographic features (age, number of siblings, which sibling they are, parents' educational status, parents' occupations, family's socioeconomical status, settlement status, type of high school graduated and from which choice they made it to college).

Keywords: learning approaches, deep learning, superficial learning, strategic learning, vocational high school students

Academic discipline: Mathematics education
Paper ID : 142

Pre-Service Teachers Understanding Of Inclusion Relations of Quadrilaterals

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This study investigated pre-service teachers' (PT) understanding of inclusion relationships of quadrilaterals. In addition to describing PTs' understanding of inclusion relations of quadrilaterals; it is also aimed to document PTs' cognitive development of understanding of quadrilaterals. A designed questionnaire was administered to 58 PTs who are going to teach middle grade mathematics at the beginning and again at the end of the semester. The findings of this study demonstrated that the majority of the PTs only recognized basic relationships of quadrilaterals primarily. However, the number of PTs who understand this hierarchical relationship among quadrilaterals increased through the end of the semester.

Keywords: Pre-service teachers, quadrilaterals, geometry, hierarchical relationships



Academic discipline: Education technology, IT
Paper ID : 145

**Web-based Blended Learning Experience in Programming Languages:
Student's Opinions**

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The learning environment which shall increase the desire and effort of the students for reaching to the learning goals, increases the success and motivation. The negative and positive opinions of the students related with the effectuality of this learning process and the successes of the students in computer programming course which the face-to-face and web based e-learning methods are blended, are examined in this study. The study which the case study method is used, is actualized in a process of 12 weeks with the participation of 44 students. Data collection tool which consists of open ended questions, is applied to the participants at the end of the process. The replies given by the participants to the data collection tool, were analyzed by using qualitative analysis techniques. At the end of the research, the evaluation and satisfaction points of the students related with web based blended learning environment, are found as positive in high level. The positive opinions of the students are particularly gathered in four themes as to be "the simplification of the learning by the learning environment", "providing interaction opportunities", "dispatch to the research", "supporting the course with videos" and the negative opinions are gathered in themes of "lack of sufficient application", "experiencing technical failures", "non-appropriate time for course" and "the comprehensive course content".

Keywords: Blended learning, student's opinions, programming languages, web based learning

Academic discipline: CEIT, education technology
Paper ID : 146

**Teachers' Attitudes towards Problems in IT Training: a case of Kırşehir
Province**

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Information technologies have become one of the irreplaceable bases of the contemporary societies of present day. The individuals growing in the contemporary societies must benefit from the IT and use this technology in the best form. In informatics technology education, our teachers have major responsibilities and duties. The problems of information technologies teachers, the reasons of these problems and the solution suggestions are analyzed in this research. The participants of this research consist of 40 IT teachers working in secondary school institutions in Kırşehir. According to the results of the research; the most frequent problems of the teachers are physical environment, attitudes of the families against the course and the tool-equipment problem. The least frequent problems of the teachers are related with student and program. Besides, it is found that the problems which the teachers confront in IT education show no significant difference in terms of gender and age group.

Keywords: Information technology, IT, teacher of IT, secondary school



Academic discipline:
Paper ID : 147

The Use of Ict in Teaching English as a Foreign Language

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Over the past few decades there has been an upsurge of interest in searching a contemporary instrument to promote language teaching. Based on the previous review of literature, there is widespread consensus that the technological changes paved the way for meeting the needs of ever changing world. In this shifting educational landscape, a considerable amount of research has agreed that Information and Communication Technology (ICT) play a critical role in the field of teaching English as a foreign language (EFL). With the blossoming of the ICT as a new tool in language teaching, EFL teachers and methodologists are expected to adopt a new view of integrating basic ICT skills in EFL classroom appropriately. It is prerequisite for equipping language learners with necessary technological skills. The application of ICT requires certain language skills, strategies and language skills. Introducing ICT into language classroom has great implications for curriculum reform, classroom teaching and student learning. It is believed that the increase of information and communication technologies (ICT) has dramatically reinforced and created powerful learning atmosphere. The implementation of ICT into real language context is more critical today than ever before since its growing power and capabilities are triggering a change in language learning environment. During the last two decades, the integration of ICT in language education has become a major interest of topic in language educational realm. Research findings over the past two decades provide some evidence as to the positive effects of the use of information and communications technology (ICT) on students. EFL teachers are expected to adopt a new view of their roles and professional development in the rapidly changing modern society. The present study also examines the roles that EFL teachers are asked to assume. It is needed to explore particular skills required for ICT to enhance language learning. The use of ICT as a teaching tool emphasizes obtaining, analysing and organizing information, by this way giving chance students to get in touch with different kinds of media. Integration of ICT necessitates to decide different use of ICT in each skill, the types of ICT applications to be used, planning the favourite activities, managing problems arising from the activities planned, and so on. Information and Communication Technologies (ICTs) can be regarded as a new model of teaching and learning. A great number of studies have been conducted to examine the advantages of integrating ICT into foreign language education. Therefore, the integration of new ICT tools such as laptop, interactive whiteboard, LCD projector, Internet and social networks in education support will help learners to use English in a very natural, real, communicative and stress free language learning environment.

This review study is framed around to provide a deep and clear understanding about use of ICT in teaching English and examine ICT to meet the new educational demands of the current era. Namely, the aim of this paper is to present a comprehensive review as to advantages and disadvantages of using ICT as an instructive tool in EFL classroom. Based on aforementioned considerations, this study aims to shed light on how ICT contribute to English learning process and help identify the factors influencing the success implementation of ICT. Furthermore, the certain major suggestions will be made both in practice and theoretically to maximize beneficial use of ICT in EFL classroom settings.



Keywords: Foreign language learning, CALL, Information and communication technology, EFL



Academic discipline:
Paper ID : 148

A Review on Educational Computer Games in Efl Classrooms

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In recent years, technological innovations and developments have made valuable contribution to every field of educational realm. The emerge of ICT have given certain significant impact to the teaching of English language as a result of rapid technological development and globalization. Recent improvements in Information and Communication Technologies (ICTs) have led many researchers to study computer games and their effects on students' learning. Digital game based learning is a growing field of using games in education and training of different knowledge and skills.As opposed to CALL, where the computer assists learning, in digital game-based learning the games are central and main form of teaching.The development of educational games has prompted the use of computer games for educational purposes.

A wealth of research reported that educational computer games have recently drawn the attention of educators and researchers as they provide a effective learning environment in which to motivate students, thanks to their attractive features and entertaining aspect. The game is well-known concept, which refers the individual to experience simulated real life situations competitively. Educational games are defined as a type of software that permits the students to learn course topics or to develop problem-solving abilities by using game format. In other words, games may be effective tools for promoting learning and facilitating to comprehend complex subject matter. It is widely believed that integration of educational computer games into modern educational system would help to resolve current learning difficulties. A plethora of educational computer games have been developed to help students become engaged in the language teaching. Educational computer games have been introduced to language learners and EFL teachers as an innovative strategy for improving the quality of language instruction.

Educational computer games have brought a new and fruitful dimension to education by supporting student centered learning, increasing student motivation and promoting learner autonomy. The learners strive to solve the problem using different effective methods or techniques while playing educational games. Furthermore, learners discover more than one method of solving the problems they face as they play the game. Playing games may also increase employment of different metacognitive or higher order skills that are needed in language improvement and digital environments. Educational computer games as an effective supplementing tool increase motivation, autonomy and long-term retention, makes learning fun and effortless. A well-designed game should be employed and integrated into course syllabus appropriately by EFL teachers. Based on these assumptions, this study aims to shed light on the contribution of educational computer games to EFL context.

This review study aims to explore the impact of use of educational games to language learning and teaching process from different aspects. Afterwards, necessary factors for the employment and implementing of educational games into flow of regular language course are presented. The characteristics and examples of well-designed computer games are defined, and the roles of both teachers and learners in that process are discussed. In addition, certain major suggestions will be made both in practice and theoretically to raise the use of educational computer games in EFL classroom settings.



Keywords: CALL, game, educational computer games, foreign language learning, EFL



Academic discipline:
Paper ID : 150

The Examination of Teacher Candidates' Perceptions of Learning with Technology and Attitudes towards the Use of the Internet Regarding Different Variables

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One of the most affected areas of the rapid changes that occur in technology, of course, is Education. As is known, technology is one of the important tools that enables progress in education. At the present time, it is required that teachers both have the skills to use the technology efficiently and use this technology productively in the teaching-learning processes. In this era, the use of the Internet has become an almost unavoidable necessity. It is seen that the vast majority of the population is under the influence of the internet that begins to affect social life in our country. In the information societies, the internet has an important place as a tool to access and to share information. For the effective use of the Internet in the teaching process, it is quite important to educate teachers. Considering the opportunities that the Internet provides, it is clearly understood that the Internet integrated with the courses has an importance in the teaching process.

The aim of the study is to examine mathematics teacher candidates' perceptions of learning with technology and attitudes towards the use of the Internet in terms of different variables. The sample of the study included 102 students studying at 1st and 2nd grades of Department Of Mathematics Education at Bayburt University in the spring semester of 2015-2016 academic year. Comparison method, which is among non-experimental designs of quantitative approach, was used in this study. As a data collection tool, the scale of Self-confidence Perception for Learning with Technology which was developed by Papanastasiou and Angeli (2008) and Attitude Scale Towards The Use of Internet which was developed by Tezci (2009) were used. The collected data were evaluated by using SPSS program (Statistical Package for the Social Sciences) package 18.0. Independent samples t-test was conducted in order to determine whether there is a significant difference between the mathematics teacher candidates' scores of perceptions of learning with technology and attitudes towards the use of the Internet.

The results of this study showed that the point average that the female students obtained from the scale of Self-confidence Perception for Learning with Technology is more than the point average that the male students obtained. There is not a statistically significant difference between these averages. It was seen that the male students' point average obtained from attitudes towards the use of the Internet is more than the point average that the female students obtained. There is not a statistically significant difference between these averages.

While significant differences were not found statistically between perceptions of learning with technology and attitudes towards the use of the Internet in terms of gender, it was seen that the point average of 2nd grade students obtained from the scale of Self-confidence Perception for Learning with Technology is more than the point average of 1st grade students. There is a statistically significant difference between these averages. According to the results of this study it was seen that the point average of 2nd grade students' point average obtained from attitudes towards the use of the Internet is more than the point average of 1st grade students. There is not a statistically significant difference between these averages.

Keywords: Mathematic teacher candidate, technology, learning, the use of the internet, attitude



Academic discipline:
Paper ID : 151

**Examining Formal Creative Thinking Skills of 9th Grade of Secondary
Education Students**

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The aim of this study is to explore the effects of a work environment that is designed in accordance with the teaching of Mathematics on 9th Grade of Secondary Education students' formal creative thinking skills. In this context, math lessons were processed in accordance with the teaching of mathematics during 28 weeks and the effects of this teaching on creative thinking skills was investigated. In this study, during the application period, activities and problems in math textbook that is in accordance with the secondary school mathematics curriculum of the Ministry of Education were used. Any method or approach were used dominantly in continuation of courses.

The sample of the study included 40 students studying at 9th grade of Secondary Education in Osmaniye Toscelik Social Sciences High School in 2015-2016 academic year. Teleological sampling method was used in order to determine the students to be included in the study. In this study quantitative research method was used and pretest-posttest experimental design was adopted.

As a data collection tool, Torrance Test of Creativity Thinking (TTCT) Figural Form B was used. TTCT Figural Form B consists of subscales such as fluency, originality, elaboration, abstractness of titles and resistance to premature closure. With the TTCT Figural Form B, norm and criterion-referenced subscales are obtained. TTCT Figural Form B consists of 13 criterion-referenced subscales: emotional expressiveness, storytelling articulateness, movement or action, expressiveness of titles, synthesis of incomplete figures, synthesis of lines or circles, unusual visualization, internal visualization, extending or breaking boundaries, humor, richness of imagery, colorfulness of imagery, and fantasy. It also consists of five norm-referenced subscales: fluency, originality, elaboration, abstractness of titles and resistance to premature closure.

SPSS 18.0 program (Statistical Package for the Social Sciences) was used for analyzing the obtained data for TCTT. In order to search whether there is a significant difference between pretest-posttest scores, whether or not the data distributions are normal was examined. The skewness and kurtosis values were examined for normality test. While valuating the data, the paired sample t test was done for these sub-dimension values which remain -1 and +1 and Wilcoxon test was done for other sub-dimensions.

The findings of this study showed that a work environment that is designed in accordance with the teaching of Mathematics has a positive effect on formal creative thinking skills of students'. The data obtained by using Torrance Test of Creativity Thinking Figural Form B at the beginning and end of the application showed that there is a significant difference in favor of the posttest. When the obtained results were examined for the lower dimensions of TTCT Figural Form B, significant differences were not found between pretest and posttest results for the dimensions of originality, abstractness of titles, elaboration, synthesis of incomplete figures, synthesis of lines or circles, richness of imagery and colorfulness of imagery. But significant differences were found in favor of the posttest for the criterion-referenced subscales of emotional expressiveness, storytelling articulateness, movement or action, expressiveness of titles, unusual visualization, internal visualization, extending or breaking boundaries, humor and fantasy, furthermore, significant differences were found in favor of the posttest for the norm-referenced subscales of fluency and resistance to premature closure.

Keywords: Teaching mathematics, creative thinking skills, mathematical creativity



Academic discipline: Mathematics education, technology, virtual environment
Paper ID : 158

Social Norms In A 3d Virtual Learning Environment: Mathlife *

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Nowadays the design and use of different learning environments for teaching has become more and more widespread. Interactive three dimensional (3D) virtual learning environments are among these learning settings designed in light of the technological advances. These environments include avatars that visually represent users, and communication tools that allow users to interact with one another (Dickey, 2005). MathLife is one such virtual setting designed within the scope of TUBITAK project which aims to transfer the mathematics in daily life to virtual reality, thereby allowing the learners to discover for themselves the link between mathematics and real life. MathLife was designed to include a farm and a three-storey shopping centre with an ice rink, a supermarket, several department stores, and a food hall, with real-life scenarios developed and applied in line with the technicalities of virtual reality.

Each learning environment has a subculture which involves certain regulatory social behaviours expressing the teacher's and the pupils' mutual expectations. Social norms are unwritten rules orally set down by teachers, or initially formed or complemented by them through the use of their body language (Yackel & Cobb, 1996). Confining to the classroom social norms commonly negotiated by teachers and pupils in their meaning formation process would be tantamount to restricting the very nature of these norms. As Yackel, Ramussen, and King (2000) point out, every learning environment, without an exception, has its own norms. Naturally, it follows that the MathLife environment also has its own social norms. In this context, the research problem could be stated as follows:

'What are the social norms emerging in MathLife, a 3D virtual learning environment?'

The present study aims to uncover the social norms that emerge through real-life scenarios requiring mathematical skills in a 3D virtual learning environment (MathLife) for seventh-grade pupils.

This study is expected to contribute to the literature in terms of the following points, and provide guidance for future research.

determining the social norms that socially and culturally affect individuals' information gathering and building in virtual learning settings,
determining the points to consider in designing and applying virtual reality teaching activities in light of the data relating to norm formation and development in learning settings,
determining the teachers' and researchers' roles for the team designing the virtual setting so that the social norms determined can make a positive contribution to the information gathering and building process.

* This study is part of the second author's Master's dissertation supported by TUBITAK project no. 113R008.

Case study was used in a qualitative approach. The study group was composed of 10 seventh-grade secondary school pupils at a state school in central Trabzon.

The data collection instruments consisted of field notes, screen recordings of the pupils in real-life scenarios requiring mathematical skills, and semi-structured interviews. Six real-life scenarios requiring mathematical skills were used in the data collection process. The researcher was always present during the process, both taking field notes and providing academic and technical support to the pupils when necessary.

The NVivo 9.0 qualitative data analysis program was used for content analysis of the interviews and the screen recordings. In this process, first the potential norms were determined and then the social norms were uncovered taking into account the norm criteria.

The potential norms determined in the first phase of the study were interpreted again with a holistic approach, and the regulatory contexts valid in the setting through the consideration of the teacher's and pupils' mutual expectations by one or both sides were determined as the social norms. In this way, a total of 12 social norms were formulated in MathLife such as 'communication through writing', 'avoidance of exposing the answers through private communication', and 'clarification requests without hesitation'.

Since the norms form through common negotiations, only some of the behaviours determined as potential norms evolved into social norms. While some of these social norms found to be valid in MathLife were specific to the technicalities of the virtual setting, others could well be valid in the classroom as well.

Keywords: 3D virtual learning environment, social norm, mathlife



Academic discipline: Scientific research methods
Paper ID : 161

Philosophy of Reliability of the Qualitative Data and Interpretations

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In educational research the data are mostly collected through the scales which are about the views, perceptions, attitudes of students, teachers or parents about a topic. However, there is a significant question about these data: How do these data represent true assumptions of the participants? In educational research the bias of the researchers affects the hypothesis and data collection process (it may refer to the view that all scholarship is ideological). Therefore, all data collection analysis should be reviewed.

In educational research the data collected from textual and audio sources are regarded as having a single meaning and the resulting interpretation is carried out based on this assumption. In some cases different coders are used to improve the reliability of the study. In this attempts the consistency of coding is aimed (such as Miles/Huberman, Clippendorf Alpha). In linguistic and semiological studies it is assumed that there is intertextuality which means that each text is dependent on the previous texts and that language determines the perceptions, views and attitudes of individuals. However, texts are also influenced by historical, psychological and sociological factors. In educational research do researchers follow true information? It seems that pragmatic philosophy which argues that correctness is not absolute, but functional is still dominant in educational research. On the other hand, many people regard belief as one of the major criterion for correctness. The reliability of the study results about the views, attitudes and interests of individuals leads to the question of “do people produce truth?”

In scientific research textual data are considered to have a single meaning. This assumption is valid for text mining and content analysis techniques. However, in order to reach true scientific information the data should be analysed through such techniques as hermeneutics, deconstruction and archeology of knowledge. This study deals with the role of these techniques in qualitative research design.

The ultimate goal of scientific research is to capture truth and correction. Scientific knowledge is the one of which truth is commonly accepted and is consistent with the dominant paradigms. There are certain methods to gather such scientific knowledge.

It has been accepted that research methods used in social science is different from those used in natural sciences. Cause-effect relationships observed in non-living beings cannot be valid for individuals. In social sciences the reactions of individuals are accepted to be searched for. Reactions have been considered to be affected by many distinct factors.

In qualitative research data are gathered through observations and interviews. Answers by the study participants to scales are considered to reflect the true views of them. However, researchers may have doubt about these answers. Hermeneutics also contain such doubts which make it difficult to capture scientific knowledge.

There is no absolute true information. Instead, there are different sense and interpretations of individuals, which is the basic premise of hermeneutics. It requires the use of different coders and different interpretations. Therefore, the data collected should be coded by different people and interpretations should be done by different individuals.



In educational research survey questionnaires used as a data collection tool deal with the views of teachers. Instead, these tools provide us with the legal and correct answers based on the current regulations. We may study this case following Foucault's "Archeology of Knowledge" technique and see that teachers should give such answers.

Many argue that in qualitative research hermeneutics should be major basis. Everybody recognise the significance of interpretation in qualitative research, but the valid method for it has not been well-established.

The data gathered from social science and humanist studies should be discussed in relation to their benefits and use in developing solutions.

Keywords: Educational research, data, coding, textual data, reliability, interpretation



Academic discipline: Scientific research methods
Paper ID : 162

Using Data Mining and Text Mining Techniques in Education Research

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Today there are many specialized ways of data storing and retrieving. Photographs, movies, articles and other similar data can be stored in electronic settings. Given that such storing provides high opportunity, it is called information explosion. Search engines scan the related data based on the keywords given by the internet users; based on the data gathered by firms they offer sale proposals. There are computer programs offer users the related texts via internet; these are also used by websites. Internet users' data through emails, messages shared via social media such as facebook and twitter can be analysed for security and terrorist threat purposes. In scientific research there are many search engines, including GoPubMed in the field of biomedicine. In short, the computer-assisted text analysis has become widespread which provide search opportunities using different technological ways and software.

The data in libraries and in digital settings are mostly in the form of the unstructured texts, audio and visual files. These data should be transformed into information for researchers. This topic is significant for novice research techniques. Therefore, new computer software is needed to analyse these data correctly and systematically.

In educational research the use of text-, audio- and visual-based data has become frequent in recent years. In parallel to this change new techniques have appeared in regard to such data. On the other hand, there are different analyses for audio and textual data and for visual (film and photographs, etc.).

The use of text mining has been expanding. For instance, it has been used for customer relationship management. Public institutions also use it to reveal fake data. It may analyse illness reports, economical reports, and unpublished research. Terrorism, aggravated theft, criminal offenses can be traced using text mining technique.

In text mining uncovering patterns is similar to factor analysis. In this technique patterns in texts are uncovered using computers. Similar to the analysis of frequency, correlation and significance in qualitative research techniques, the frequency of words used in a text and connectedness (correlations and connection) are identified. The other goal is to have visual representations of these data. In text analysis it is possible to reveal the feelings, views of individuals which can also be done on audio and photograph data sets.

In all scientific research the basic requirements are strong measurement, clean data sets which are error free and structured. The reliability of the study results is based on these qualities of the data.

It is thought that text mining will be easier in future, because the Web 3.0 technologies, also called semantic web, would analyse texts and objects in internet together with their meaning. In other words, the texts would be put into Internet after the use of text mining. Metadata vocabulary groups (ontology), groups of words and concepts (maps) will be ready in texts.

The basic aim of the Web 3.0 technology or semantic web is to make data usable and connected information.

The Web 3.0 technology would assume the role of assistant that knows everything. In present period when search engines are used only websites containing the related words are listed.



When the Web 3.0 technology or semantic web is used, the engines will interpret the websites and only related websites will be offered.

The Web ontology language will be standard and it identifies common vocabulary or terminology. The resource description framework (RDF) will be put in files containing vocabulary hierarchy and the correlations of the objects.

Keywords: Educational research, data mining, text mining, coding, concepts map, reliability



Academic discipline: Scientific research methods
Paper ID : 163

The Effect of Portfolio Application and Proper Course Plans for Learning Styles on Test Anxiety in General Biology Laboratory Course

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In this study, learning styles of science teacher candidates via Kolb Learning Style Inventory (KLSI-3) have been determined, then proper General Biology Laboratory course plans have been structured and teaching activities which would be evaluated by using portfolio have been developed. The aim of the study is to investigate the effect of courses in the line of these course plans to teacher candidates' test anxiety.

The use of alternative methods of measurement and assessment has become almost obligatory because of the differences in learning styles. The assessment of students has much broader meaning than responding to a series of test questions. The measurement and assessment is not a task which is given marks to students after exams. For this reason, a new approach should be adopted also for measurement and assessment and also should give place to different assessments such as portfolio, concept maps, structured grid, branched diagnostic trees, projects, interviews, posters, group and peer assessment, self assessment into an effective training and education process on frame of reconstruction.

In this study quantitative methods has been selected. This study has been conducted by using pre-post and control-experimental design of quasi-experimental design models. The control and experimental groups were chosen randomly between three classes in the Education Faculty. 100 university students from Ondokuz Mayıs University Science Teacher Education Department have been the sample of the study. 35 of them have been in the Experiment-1 group, 32 of them have been in the Experiment-2 group and the control group has indicated 33 students. Study has been continued for 20 weeks. In the control group, laboratory course has been carried on traditional teaching methods while experiment-1 group has been treated by portfolio applications. In the experiment-2 group, the courses have been sustained with 20 General Biology Laboratory course plans specialized for each week, proper for learning styles and structured by the researcher. Study has been lasted 40 hours, 2 hours per week and completed in 20 weeks.

In the study "Test Anxiety Test" and "Kolb Learning Styles Inventory" have been performed as pre tests and post tests to whole group. Finally, the study examined the differences in the science education students' biology teaching anxiety according to their groups. It has been concluded that the applications have more negative effects at the university students' test anxiety. In short, the study documented that the science education students included all types of learning styles: convergent, assimilator, accommodator, and divergent. Although control and two experimental groups' students have equal test anxiety for pre test, after the application both of experimental group students have less test anxiety than control group students. Moreover, the the science education students in control group had the highest level



of biology teaching anxiety It has been concluded that the applications had been more helpful to decrease the stundets' test anxiety in biology education.

Keywords:



Academic discipline:
Paper ID : 164

Comparison of Teacher Education and Selection Systems of Turkey, China, Finland, Japan and Holland

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This study compares the teacher selection and placement systems of Turkey, Finland, China, Japan and Holland. PISA results were taken into consideration in the selection of countries other than Turkey. According to PISA results, some of the countries in the first ranks of general average were chosen. The objective of the study was to find out the differences between Turkey and the countries in the first ranks according to PISA results.

When the teacher selection and education system in Turkey is analyzed, it can be seen that students who finish their high school education take some exams which are given country-wide to place the students in university and those who succeed in these exams can start their university education. The students who want to become teachers start education faculties in accordance with the scores they get from these exams and they take the Public Personnel Selection Examination (KPSS). Teacher candidates who are successful in KPSS start teaching.

There are various alternatives and schools to become a teacher in China. Not only education faculties are responsible for educating teachers. Alternatives for becoming a teacher in China are; 3-4 years of teacher colleges for primary school teaching, 4 year-long teacher college or university for secondary school teaching, 4 year-long teacher college or university for high school teaching, and master's degree for some of the high schools.

When the teacher education system in Finland is analyzed, it can be seen that teaching is a very important profession. Thus, educating teachers is also very important. General proficiencies of teachers are being aware of individual differences and respecting these differences, cooperation and communication with other teachers, collaborative works with families and various sections of the society, preparing and developing effective and suitable learning environment and materials, continuing occupational development (Ekinci and Öter, 2010). Apart from these proficiencies, it is not enough for teachers to have a bachelor's degree. Teachers take some tests such as written exam, interview and aptitude test, the contents of which differ between universities.

In Japan, bachelor's degree is not enough for teacher candidates to start the profession (Atanur Başkan, Aydın and Madden, 2006; Odabaş, 2010). Teacher candidates in Japan take a proficiency exam which includes information about general culture, their field of study and occupation to become a teacher and this exam is given three times a year. The candidates who pass this exam are also subject to an interview and a practice exam. The candidates who are successful in this exam are taken to internship program and those who complete a 6-month-long internship program become public officers and they are assigned as teachers (Uçar and Uçar, 2004).

When Holland's education system is analyzed, it can be seen that three different ways are followed (Ergun and Ersoy, 2014):

-In order to be able to become primary school teachers, students have to get an education at institutions named PABO (Primary School Teacher Training College) affiliated to vocational higher education with four-year-long integrated programs.

-In order to be able to become teachers at the first half of secondary school education, students have to get an education at teaching programs affiliated to vocational higher education with four-year-long integrated programs.

-In order to be able to become teachers at the second half of secondary school education, students have to have one-year-long postgraduate education after an undergraduate education in academic universities.

As a conclusion, in other countries candidates of teachers start profession after passing from various stages, after their proficiencies about teaching and their practicing skills are evaluated for a specific period of time. However, in Turkey, candidates of teachers have to take an exam named KPSS after completing their bachelor's degree. Based on these comparisons between countries, it is thought that the process of selecting students and the system of educating teachers should be reviewed in terms of its technical and academic dimensions, the systems in developed countries should be studied and redesigned (Atanur Başkan, Aydın and Madden, 2006).

Keywords: Teaching, teacher education in Turkey, KPSS, teacher education in the world



Academic discipline: Computer education and instructional technology, distance education
Paper ID : 166

Development of an Online Learning Management System and Investigation of Its Usability*

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The individuals have to develop themselves constantly for competing in their fields and gaining the skills of 21st century. When it is considered that developing, testing different online learning management systems providing opportunity to the individuals to learn in needed amount and in their own speed, shall facilitate the access to the targeted learning outcomes, it is thought that the results of this study shall make major contribution to the literature. In this respect, the aim of this study is to analyze the development and usability of the online learning management system. Firstly, the specifications which are obligatory in an online learning management system for considering the recent development in the literature, are determined in scope of the research. Then, online management system is determined by determining the most appropriate platform in accordance with the current opportunities. For actualizing the pilot application, it is provided to have the content of the course of "Information Technologies in Education I" in digital form and to integrate to the online learning management system. Then the course is made by using the online management system developed in "Information Technologies in Education I" course. The online learning management system is finalized according to the feedbacks and the content of "Information Technologies in Education II" course has been made in digital form and it is applied by using learning management system. At the end of "Information Technologies in Education II" course, the feedbacks of the students related with the usability of the system. The research is carried out with the data obtained from 52 students giving appropriate answers to the questions in the data collection tools. The personal information form which is developed by the authors and the web site usability scale which is developed by Kılıç Çakmak, Güneş, Çiftci, & Üstündağ (2011), is used in the collection of the data. The results of the study shows that the students perceive the usability of the online learning management system in high level. Besides, the points given by the students related with the usability of the learning management system, do not show a significant difference in terms of gender.

Keywords: Online learning management system, usability, ease of navigation, design, ease of access, ease of use

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Academic discipline: Instructional technology
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Comparing Students' Scratch Skills with Their Computational Thinking Skills in Terms of Different Variables

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Computational thinking skills are no longer the abilities that only computer technicians should have but the basic skills that are necessary for all individuals. Computational thinking skills are important requirements especially for children. Hence many countries have recently made efforts to include computational thinking skills in educational programs. In this context, this study aimed to compare the scores obtained via Dr web tool by 5th graders from Scratch projects developed in the framework of Information Technologies and Software classes with the scores obtained from Computational Thinking Levels Scale and to examine this comparison in terms of different variables. Correlational research model was utilized in the study in which a total of 31 students (16 females, 15 males) participated. Students were taught basic programming by using Scratch during a 6-week period. The 6-week process included the presentation of the interface used in the Scratch program, registering the projects they prepared, uploading a registered project to Internet and working with code blocks. Students were expected to develop an original project under the guidance of their teacher during the last weeks of the study. At the end of the training, students' programming skills with Scratch were measured via Dr. Scratch web tool. Dr. Scratch which provides a web based analysis helps students and teachers at 7 points including abstraction, synchronization, analogy/parallelism, information, user interaction, digital logic and control flow. The web tool is used for project assessment and 3 points are assigned for each level and the highest score is 21. The web tool provides separate scoring for each level. Scores provide project level as basic, developing or master levels. Computational thinking skills were measured using Computational Thinking Levels Scale which includes 5 factors: creativity, problem solving, algorithmic thinking, collaboration and critical thinking. Data were analyzed for internal reliability to calculate the reliability of the scale and Cronbach Alpha reliability coefficient was found to be 0.809. It was found that scores obtained by the students by using any of the measurement tools did not differ according to gender or period of computer use, however, a high level significant relationship was observed between students' programming skills with Scratch and their computational thinking skills.

Keywords: Scratch, thinking skills, computational thinking, dr. scratch



Academic discipline: Visual literacy, art and crafts department, qualitative research
Paper ID : 171

Arts and Crafts Teacher Candidates' Visual Literacy Skills

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In the world today, which is intertwined with visuals, the importance of communication skills with visuals are increasing day by day. Visual literacy is necessity for deeper communication with visuals. This necessity is more essential for the areas, which are intertwined with visuals. That's why this research was aimed to describe how was the visual literacy skills of the students studying in Department of Fine Arts Education who were candidate for being teacher. The sample size of this qualitative research was 140 (91 man, 49 woman) students who were studying at first and final classes of State Universities of Turkey, Faculty of Education Fine Arts Education Department. Data Gathering tool, which was developed by the researcher, consist of nine open-ended questions and class levels, genders and region of the universities of the teacher candidates were asked for demographic characteristics. Content analysis was used to analyze the gathered data. After the analysis, the data was coded in two groups. First group called "Visual Reading Classification"; "Accessing the Visual", "Visual Codes", "Analysing the Visual", "Interpreting the Visual", "Evaluation of the Visual" and second group called "Visual Writing Classification"; "Prefers to Sketch", "Prefers to Write". And sub headings about the data were given inside. In the light of these codes data were examined. It is observed that responds of the teacher candidate students mostly did not correspond to the answers of the questions. There were no distinctive differences among classes' levels of the students in terms of their visual literacy levels. This was concluded due to the absence of visual literacy or related lectures in the departments of visual arts. Thus, the alternative solutions for this issue and increasing visual literacy levels of the students were recommended.

Keywords: Visual literacy, visual reading, visual writing, visual learning and qualitative research

Academic discipline: Music education, Soundpainting
Paper ID : 172

A New Approach in Music Education Improving Creativity: Soundpainting

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Common characteristics of Orff, Kodaly and Dalcroze music education approaches are not only that they are the education methods improving the creativity but it is also that they gain aimed behaviors in dramatization, improve musical skills and ensure adaption into social environment thanks to music, acquire mental skills such as motivation, attention and self-confidence. Soundpainting is the universal live composing language created for musicians, dancers, actors, poets and visual artists working in their improvised environment. Just like other music education methods, education of Soundpainting is quite an important music education approach in terms of development in the creativity of individuals, their musical and mental skills. With this study, it is aimed at contributing to music education and teaching by providing information about Soundpainting. This research is one of the very few studies, which carried out in the fields of Soundpainting. Therefore, it is important in terms of its contribution to the both education and Soundpainting fields. This research is descriptive research and data were obtained by literature review. At the end of the research, it was emerged that Soundpainting has common ground with the other music education approaches and it could be used in music education.

Keywords: Creativity, music education, music education approaches, soundpainting



Academic discipline: Curriculum and instruction
Paper ID : 174

Metaphorical Representations of Teacher Candidates toward Warrior Images Belonging Different Cultures

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Humans mostly don't perceive reality as it is and as they are in some cases. The educational background, learning readiness, motivations, selective memory, cultural background, environmental, biological factors may affect the perception and interpretation of the data from surroundings in this sense. Creative thinking can be regarded among these factors for the interpretation of the data and converting them into ideas in this respect. Creativity can be defined as an ability to change, combine or use ideas or products in different situations, contexts to produce original outcomes with respect to the context, culture or history of creative individual that are located. Creative thinking skill has dimensions such as developing detailed ideas and enrichment, finding unique solutions to the problems, and having a holistic view. Metaphorical thinking skills can be categorized as the most abstracted thinking skills among creative thinking and reasoning skills. Metaphors can be defined as the abstract concepts which mostly have a concrete correspondence in real life but has nothing to the with the real object itself in terms of meaning. They are reflecting the beliefs, creative interpretations and perspectives of individuals. Therefore, the metaphorical interpretations and depictions of individuals may vary in terms of different variables as gender, age, cultural background, education level. The aim of this study is to investigate the metaphors of teacher candidates in terms of attitudes toward different cultures, the types of metaphors they produced and the abstraction level of metaphors they created.

In this study it is thought that metaphors can be used to analyse the creativity of students in terms of their attitudes toward different cultures. The research is qualitative research based on case study design. The data collection technique was focus group interview and the data collection tool is a semi-structured interview forms in which some metaphors which has three parts. In the first part of the research participants were briefly informed about what metaphors are and how they used and produced. In the second part the questionnaire consisting from two semi structured questions and survey questions was delivered students. The first parts is the area in which students give metaphors regarding on samurai, knight and janissary. The second part consists of survey questions regarding those three different warriors belonging different civilizations. The last part consists of pictures regarding those three warriors in which participants choose one picture among different representations for each warriors. Hence they chose the warrior image fitting their own previous knowledge and image of them.

The population was selected by simple random sampling. The population of this research consists of 150 students from 4th grade from Psychological Counseling And Guidance Department.

A qualitative content analysis approach was used to analyse the data obtained from this research. In the analysis of data of metaphors, metaphors are coded for the first part of sheets. In the second part codes are merged into themes and those codes and themes for each sheets are compared. Finally in terms of common points of metaphors and their similarity with their interpretations, the data was analysed. Finally those themes are analysed in terms of the originality of their descriptions, similarity of their answers, the originality of their metaphors. In the second part of analysis, survey questions regarding their knowledge and attitudes on samurai, jannisary and knights are analysed quantitatively in terms of mean values, frequencies and percentages. Finally, the pictures they chose from the last part of the sheets and their descriptions are categorized under similar themes. The results of the analysis of metaphors and pictures are compared and analysed in terms of the answers from survey questions at the end. The results will be given in the full-text.

Keywords: Metaphors, metaphorical thinking, creativity, attitudes toward different cultures



Academic discipline: Science education, outdoor education
Paper ID : 175

**Investigation of Science Teacher's Nature Experienced (Outdoor) Nature Education
Self-Efficacy Perceptions, Environmental Attitudes and Environmental Knowledge in
Terms of Various Variables**

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This study aims to investigate Science Teachers' self-efficacy perceptions towards outdoor nature education, environmental knowledge and attitudes in terms of various variables. The participants of this study are 102 Science Teachers working in different secondary state schools in Mediterranean Region. Self-efficacy Towards Outdoor Nature Education-Scale (STONE), Environmental Knowledge Test (EKT) and Environmental Attitude Scale (EAS) are used as data collection tools. STONE was developed by the researcher in order to measure participants' self-efficacy beliefs towards outdoor nature education. STONE has three factored structure, which includes 20 items. The Reliability analysis show that complete scale's and each factors' reliability coefficients are 0,921; 0,850; 0,793 and 0,878. Confirmatory factor analysis (CFA) made for construct validity. Results of CFA shows that, the fit indices are acceptable. EKT developed by Altınöz (2010) for using it in his master thesis, has 15 multiple choice items. EKT's main purpose is scale participants environmental knowledge levels and reliability coefficient has found as .64. EAS developed by Kışoğlu (2009), it is a five point Likert type scale and has 18 items. EAS has five subscales named as; concern, responsibility, awareness, sensitivity and support and its' reliability coefficient has found as .77. For the data analysis non-parametric Mann Withney U, Kruskal Wallis H tests, and correlation analysis were applied by using SPSS 17 package program. In this study, participant teacher's self efficacy perceptions, environmental knowledge and attitudes were investigated for five various variables as; gender, working experience, frequency of performing outdoor nature education activities, attending a nature education project condition and to execute a nature education project conditions. The findings revealed that, the Science Teachers have medium level of environmental knowledge (:9.25) and shows istatistically significant differences with working experience variable ($p<0.05$). Other variables (gender, frequency of performing outdoor nature education activities, attending a nature education project condition and to execute a nature education project conditions) found not effective on teachers environmental knowledge. According to STONE findings, participants' self-efficacy perceptions found as high (52.9%) and findings for the each subscales (setting, implementing and evaluating) high (50.8%, 43.2%, 45.1%). Therewithal, frequency of performing outdoor nature education activities and attending a nature education project condition variables are found significantly effective ($p<.05$) on participants self efficacy perceptions. Other variables in the study, (gender, working experience and to execute a nature education project) found not effective on participants self efficacy perceptions towards outdoor nature education. Once and for all, when Science teachers' attitudes towards environment investigated, there were no participants has very low or low attitudes (0%), three of participants (2.9%) have medium, 30 of participants (29.4%) have high and 67 of participants have remarkably high (65.7%) positive environmental attitudes. Two variables, attending a nature education project condition and to execute a nature education project conditions were found statistically and

significantly ($p < .05$) effective on participants' environmental attitudes. When the results evaluated in a general perspective,

- Outdoor nature education activities has important role on developing environmental attitudes and environmental knowledge,
- Environmental self-efficacy perception levels can be increased by outdoor nature education activities,
- Science Teachers have inadequate environmental knowledge levels, can be said as noticeable results.

Keywords: Outdoor nature education, self-efficacy belief, environmental knowledge, environmental attitude



Academic discipline: Educational technology
Paper ID : 177

Examination of Primary and Elementary School Teachers' Aspects towards Educational Use of Video Sharing Websites

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Today, various educational materials created by the rapid shift in technological development are begun to be used by teachers and learners. These new educational materials support learning with permanent existence of knowledge in memory. Video, one of these technological tools, is a multimedia source that combines audio and visual items together, which makes it an effective learning material. Daily use of video has increased by televisions, but lately people have been using video sharing websites such as Youtube and Dailymotion most frequently. This extended use of video sharing websites has emerged a new era for education; teachers and learners can use them to enhance learning in education. Hence, the purpose of this study is to examine primary and elementary school teachers' aspects towards educational use of video sharing websites. The basic research problem statement for this purpose is determined as: "What are the aspects of primary and elementary school teachers for educational use of video sharing websites?"

This research is conducted as a survey model and carried out with the participation of 114 teachers in total, 48 teachers from Taşkent and 66 teachers from Kulu district of Konya province in Turkey. Quantitative research method has been adopted as the model of this research. Data is obtained by a 19-item questionnaire and analyzed by SPSS (Statistical Package for the Social Sciences) program by using descriptive statistics and basic correlation. Results of this study revealed that teachers have positive attitudes towards using video sharing websites as an educational tool which improves learning. They think the fact that sharing instructional videos on these sites is beneficial for both students and teachers. Teachers see these sites as a learning tool that motivate students and ease their learning thanks to their rich audiovisual content. Moreover it has been seen that there is no significant difference between female and male teachers' aspects towards using video sharing sites for educational purposes. On the contrary, it is observed that there is a significant difference between teachers' aspects towards using video sharing sites for educational purposes regards to teachers' branches. Teachers of Computer education and instructional technology department have greater scores than the other branches, which can be caused by the effect of technological knowledge on the tendency to use technology. While teachers' aspects differ in terms of professional experience, there is no significant correlation is found between age and teachers' aspects toward the use of video sharing websites for educational purposes. The wide range of participants' age may be the reason for this result. According to findings, teachers have the more professional experience, the less positive aspects towards video sharing websites.

The findings revealed that using video-sharing websites in education is important as it helps teachers in instruction their course, it contributes to the learning of the students and as well as to the development of teachers in a professional manner. It is expected from this study to create new perspectives for new generations' teachers to teach the way new generation



students want to learn. It is suggested to give in-service training for especially experienced teachers. For future research, using a larger universe with different variables and gathering qualitative data are recommended for more extensive research.

Keywords: Video sharing websites, teachers aspects, online video



Academic discipline:
Paper ID : 179

Technology-enhanced Language Learning for Digital Natives

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Using technology in classrooms has many advantages especially as students become increasingly digitally literate in recent years. Young learners live their life through technology. “They are web generations and they are hungry for more” (Dale, 2014, p.1). This case has led to an increasing focus on using technology in schools and a need for developing computer skills. Pupils are so enthusiastic about using a variety of technologies in their daily life that it is essential to embed their enthusiasm into the language classroom. For that reason, language teachers have started to use different technological tools and software to enhance their instruction. They have begun to use projectors, interactive whiteboards, tablets and internet. They have started to use power point presentations to introduce a topic or explain a grammar point, use authentic texts from the Internet to improve reading/listening skills, apply online vocabulary quizzes or assign projects to the learners. They have changed the way they teach English by making use of these tools. These technological tools also allow teachers to extend classroom communication outside the walls of the classroom, thus, provides learning lifelong. There is a huge variety of available web sources that can be used by both teachers and learners to improve language learning experience. Yet, it is essential for language teachers to guide learners to use these web-based instructional tools to learn and practice English language skills. The purpose of this study is to introduce some of these web-based technologies, especially the ones appropriate for young learners to improve different language skills and to explain their benefits in developing language skills.

Keywords: Technology-enhanced language learning (TELL), digital native, web-based technology, young learner

Academic discipline:
Paper ID : 180

**Pedagogical Content Knowledge of a Science Teacher Based On Students'
Metacognitive Awareness**

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How and in which ways learning takes place has been one of the key concerns for many years. In related literature, it has been suggested that individuals should have some skills in order to achieve learning such as conducting research, solving problems, using knowledge, thinking critically and creatively, knowing and applying the ways of thinking. The concept of metacognition can be expressed as thinking about thinking or knowing about knowing which includes knowledge about when and how to use particular strategies in learning process. It has been thought that understanding how each student learns and bringing this awareness to all students is going to affect their academic life positively. Because the person who knows what is needed to be learned makes plan, knows the ways to reach the information, checks mistakes during the learning and evaluate himself/herself after the learning takes place. This process enables the subsequent learning process by establishing a relationship between old information and new one. From this point of view, the purpose of this study is to determine the metacognitive awareness of a science teacher's students and pedagogical content knowledge of the science teacher in terms of setting classroom activities for students' awareness. The participants of this study are a science teacher who has been working for 13 years in a state school in Amasya and 29 sixth grade students, chosen with purposeful sampling technique. As a method of the study, mix-type was chosen. For qualitative part of the study, in class observations and semi-structured interviews with the teacher were made. For quantitative part of the study, metacognitive awareness scale which is used for primary level students was administrated. Data analysis is still ongoing. According to the preliminary results, it can be seen that the science teacher preferred classroom activities that everyone can easily understand. But these activities are teacher-centered activities. The teacher said that it was difficult to decide and conduct the activities suitable for each student's metacognitive awareness level. The teacher expressed that length of lessons is limited and the techniques she used are resulted in problems about classroom management. When the study is completed, conclusions and recommendations will be shared.

Keywords: Metacognitive awareness, pedagogical content knowledge, classroom activities



Academic discipline:
Paper ID : 182

Evaluation of Stem Applications According To Student Opinions

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The purpose of this study was to establish how students evaluated STEM applications. These are interdisciplinary educational approaches that target a combination of different disciplines and theoretical knowledge, transforming them into a product, while at the same time prioritizing the evaluation of the process by the students. In accordance with this objective, the study was carried out with 27 students in the 7th grade of a secondary school in Samsun provincial center. Student diaries, application forms and field notes were used as data collection tools in the STEM application process, which was carried out as part of an electrical energy unit. Using the data collection tools, a qualitative analysis was conducted and the application process evaluated. When the student diaries were analyzed at the end of the STEM training, two different themes were manifest: the first theme was considered to be group work based on cooperation, while the second was assessed as being relevant to the attributes of the course.

During the applications, it was noted that when group study was required, most of the students had difficulties and experienced problems in taking individual responsibility or accepting ideas. However, some students indicated that the different ideas that manifested during the group studies had a positive impact on their products and enabled them to make corrections. There were also students who claimed that individual study was more enjoyable and more fun. Another negative aspect, upon which the students agreed, was the fact that the group elements were dependent on one another in terms of application and product transformation. If even one member of the group did not come to the lesson during the study process, there was disruption and a sense of feeling unsuccessful, due to something that was under somebody else's control and that this was unacceptable.

The second theme was the attributes of learning the lesson. The students indicated that the lessons were more fun than classical blackboard lessons and that a product had been made at the end of the application; however, such studies should not be carried out because they were laborious and tiring. The students who were not accustomed to group studies and applications complained that the class was noisy but that such activities could be more useful for certain subjects. Nevertheless, that such applications are more appropriate for life should not be ignored.

When the application form, which was designed to comprise open-ended questions, was analyzed, it was revealed that a large majority of the students found the STEM activities funny, had the opportunity to come into contact with objects that they had never seen before. Majority of the students said that they liked making their own products and designing them on the computer. However one group of the students wanted the teacher to display the products that they were expected to produce at the beginning of the study and another part wanted a change with regard to the members of their group. Furthermore the students indicated that their manual skills had improved, their interest in carrying out projects had increased, that



they had achieved more knowledge and they had learned about what aspects they should pay attention to when designing something during the STEM activities.

According to the study notes and observations it was established that students were challenged by the group studies based on cooperation; however, positive situations, such as the students who wanted to make new designs during the school break, finding out from the researcher how they could obtain design materials and plan their work, enjoying working continuously and actively in the laboratory, the enjoyment they experienced on the production of their own designs, were determined.

At the end of this study was concluded that in general STEM learning is a positive process, enabling the students to gain experience through doing and experimentation. It is believed that allocating more time to group studies in the education process will enable students to have more experience of group studies based on cooperation and it could be useful in the transformation of information in terms of life and knowledge into a product relevant to daily life.

Keywords: STEM education, science education, student opinions



Academic discipline:
Paper ID : 183

**Assessment of Physics Lessons and Association with Other Science Lessons By Science
High School Students**

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This study was carried out with the objective of assessing physics lessons, by students attending Science High Schools, where the main focus is on science subjects and establishing their association with other science lessons. To this end, a total of 43 students studying in the 9th, 10th, 11th grades of a Science High School in Samsun provincial center, which is considered to be successful, were asked 13 open-ended questions relating to Physics lessons, in addition to completing a demographic data form containing various variables. The acquired data were analyzed and assessed. When the findings were studied it was seen that the students mainly assessed their physics lesson in terms of the appropriate definition of the contents of the Physics lesson, and tended to use expressions attributable to the school curriculum. It was established that situations, such as the association with daily life of the scientific properties taught in physics lessons, were not a major feature in the perception of the students. The same situation was revealed in terms of association with other science lessons and again it was noted that associations were made on a subject basis. However, it was revealed that because of natural events the students made associations with geography lessons to a major degree rather than with the science lessons. The students indicated that they were more interested in subjects that dealt with the human body, space and the universe and favored professions in the fields of biology, medicine, physics and engineering. While a preference for these professions, which involved the subject of science, was accepted as natural it was also very surprising that not a single student showed a preference for a profession involving chemistry.

When the results of the Examination for Transition into Higher Education (YGS) and the Undergraduate Placement Exam (LYS), which are held in Turkey every year, are examined for 2016 on the basis of physics lessons the average achieved by the 2,084,091 candidates sitting the YGS examination and answering the 40 question science test, including 14 questions for physics, was 4.7, while the average of the 315,939 candidates sitting the LYS examination physics test was 6.46 for 30 questions. There is no doubt that science and physics, which plays a key role in explaining chemistry and biology, being disciplines of science, are important in terms of technology and engineering, and their importance in the 21st century are increasing every day. It is noteworthy that while physics is an important basic lesson it is also one in which the level of achievement in examinations is the least. An assessment of the students studying in Science High Schools in Turkey and who display the highest level of achievement in the YGS and LYS examinations in physics, to determine whether their knowledge level in terms of physics lessons, is limited to reading and whether they are able to view physics with a multi-faceted outlook will give an idea regarding their success in their future professions.

As a result of the study it has been determined that the students are not able to assess the sciences holistically and that they are inadequate in terms of accessing technological tools and following scientific studies. While it is expected that the Science High schools, which accept the most successful students among those whose choice it is to sit an examination for secondary school and who are interested in professions in the field of science, produces major scientists in Turkey, an education system with an intense curriculum is implemented, targeting examinations with problem solving and memorizing at the forefront, while students are unable to have practical experience of applications to the required degree. In the circumstances it is necessary to establish an order that ensures the volume of the physics curriculum is decreased and students are able to grasp the core of the physics discipline and applications in which physics, chemistry and biology disciplines can be associated with each other, are emphasized. There is an urgent need to implement an order for the elimination of these negative aspects, in terms of science education, is manifested as a necessary requirement.

Keywords: Science high school, physics education, science education



Academic discipline: Turkish language education
Paper ID : 184

**Determining the Turkish World Perceptions of Candidate Social Studies Teachers through
Word Association Test**

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The purpose of this study is to observe prospective teachers' cognitive structures related to Turkish World. In this scanning model study, WAT had been applied to 332 prospective teachers who in Niğde University. And they are asked for writing what comes into their heads when it is said Turkish Republics and Turkish World. Words are given to the prospective teachers. According to the research, 'Turk' is the only common Word which is related to the concept of six independent Turkish Republics and Turkish World. There is no any other common word except this, perceived by prospective teachers. Students generally independent Turkish Republic and Turkey they do not have a lot of information and perceptions about the world; they know the general concept of popular culture, it said they did not know specific concepts or people belonging to the country. Independent of the Turkish states K.K.T.C. It has become the most irrelevant and disconnected with other countries. K.K.T.C. with the only common link between other countries "Turkey" was the word. Students are most perceptive grasp of Azerbaijan, while country-owned; they have been gripping the country at least perceptually Uzbekistan.

Keywords: Teacher candidate, word association test, Turkish world, Turkish republics

Academic discipline:
Paper ID : 187

**The Reasons Why Students Pursue Pedagogical Formation Training Certification
Program: A Comparison of Various Departments**

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With the impact of social, economic, and political changes, the system of education has undergone changes at various times, which has consequently affected how teachers are raised. The most recent change in the teacher training program in Turkey has brought along the implementation of "Pedagogical Formation Training Certification Program" (PFTCP). In this implementation, the students or graduates, who meet the requirements regardless of their faculties or departments, can obtain pedagogical formation training. However, qualified teachers can only be raised through ensuring the participation of those, who consciously want to practice this profession. Within that context, the reason why prospective teachers have chosen the profession of teaching is of great importance.

This study aims to reveal the reasons why the prospective teachers pursue pedagogical formation training within the framework of teacher training program. For this purpose, this study has been conducted with 243 participants, 181 of which are females and 62 of which are males. These participants are from different departments including physics, chemistry, biology, mathematics, history, sociology, food engineering, and nursing-midwifery. 72 of the participants are employed, whereas; 171 of them are unemployed. 20 of the employed participants are still students, while; 52 of them are not students. 51 of the female participants are employed, whereas; 130 of them are unemployed. 21 of the male participants are employed and 41 of them are unemployed.

In the research, the participants were asked an open-ended question: "Why do you pursue formation training? Please explain your opinion". The data retrieved from the written answers received from the participants to the question were analyzed by experts in the field using qualitative research methods. The themes created within this context are "employment concerns, the desire to improve oneself and build a career, being obligated, and the desire to practice teaching as a profession". The theme of the desire to practice teaching as a profession is divided into some categories: 'the desire to practice one's dream job, the desire to obtain an additional advantage, and considering its occupational conditions as convenient'. The category of considering its occupational conditions as convenient consists of sub-categories such as 'considering it as a convenient job for women' and 'considering its working conditions as easy'.

Those, who pursue this training with the concern of finding a job, are mostly biology and sociology students. The nursing-midwifery students are the ones, who pursue this training with the least concern of finding a job. The biology and physics students consist of those who have the desire to build a career and improve themselves. The mathematics and food engineering students are the ones, who pursue this training with the least desire to to build a career and improve themselves. The students studying at the history department consists of the majority of those, who pursue this training because they feel obligated to do so. The



physics, mathematics, and nursery-midwifery students constitutes the least portion of those, who feel the aforementioned obligation. They associate this situation with family pressure. The majority of those, who pursue this training with the desire to practice teaching as a profession and thus to practice their dream job, comprises of mathematics and history department students, whereas; the sociology students consists of the least number of students with the aforementioned desire. The food engineering students makes up the majority of those, who desires to obtain an additional advantage, whereas; the physics students consists of the least number of students with such a desire. The mathematics students comprises of the majority of students, who seeks to provide an obligatory certification for teaching. The food engineering and nursery-midwifery students consists of the least number of those, who seeks for such a certification. Moreover, the nursery-midwifery and chemistry students make up the majority of those, who consider the occupational conditions of teaching as convenient thus accept teaching profession as convenient for women. The physics, food engineering, and sociology students consist of the least number of students with such considerations. The majority of those, who consider its occupational conditions as easy, are made up of nursery-midwifery students, whereas; the physics, mathematics, and sociology students consists of the least number of students, who consider its occupational conditions as easy.

Keywords: Pedagogical formation training, prospective teacher, choice of profession

Academic discipline:
Paper ID : 191

The Evaluation of Prospective Teachers' Knowledge of About Vectors

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In this study, the knowledge level and misconceptions about vectors of primary school students who study in the mathematics department of educational faculty in Ondokuz Mayıs University could be tried to expose. Vectors are a fundamental component of the mathematical language and physics. In many sources, it is emphasized that students will be successful if they have a good grasp of basic vector concepts as forces, electric and magnetic fields, kinematical quantities. We dealt with the study via this and other reasons. The sample group constitutes nine different universities in Turkey such as Muş Alparslan, Erzincan, Gaziantep, Aksaray, Yıldız Teknik, Giresun Amasya, and Ordu University. This study is applied to nine 2nd, twenty-two 3rd and thirty-five 4th undergraduate students who are fifty female (% 75.8) and sixteen male (%24.2). The questionnaire that is used as a data collection instrument consists of 6 open-ended questions concerning basic knowledge of vector magnitude, direction, addition, subtraction, scalar and vectorial product. The findings of the study were coded independently by each researcher to increase the reliability and validity of the study and it was grouped with consensus under five themes. The answers of the mathematics teacher candidates on the questionnaire were analyzed via understanding level criteria as sound understanding, partial understanding, misunderstanding and no understanding. The answers of the students have been evaluated according to scientific truth and the obtained data were analyzed by means of descriptive analysis. As a consequence of our findings, misconceptions such as "confusing vector magnitude and vector notation, the direction of vectorial addition and subtraction is determined as opposite direction, the subtraction of a vector is realized via an alternative method, it is produced the final vector in the same plane when two vectors are multiplied by the cross product, confusing cross and dot product" were determined. It has been seen that a significant fraction of students had serious conceptual confusion related to basic vector concepts. In the study, certain suggestions were given related to physics education and for future researches.

Keywords: Vectorial product, misconceptions, prospective teachers



Academic discipline: Teaching Turkish as a foreign language
Paper ID : 192

Students' Opinions about Slang in Teaching Turkish as a Foreign Language

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Slang is a living source which is frequently used in daily life. It is often used in newspapers, journals, social networking sites and collaborative internet dictionaries in which users share their opinions about a topic or a concept. In such settings, slang is used to express ideas more clearly, to mock and, to revile etc., so the language used in daily life is different than the language used in course books and in classes and it includes slang to some extent. Students, who exposed to a language in the class with course books and teachers different than in streets, shopping centres in short every area of everyday life, may get confused and have difficulties in communication. To overcome these difficulties and confusions, students who are learning Turkish as a foreign language should know about slang.

In this study the opinions of the students who are learning Turkish at the B2 and C1 level were taken by the questionnaire which was developed by the researcher. The students who participated in this survey expressed that slang should be taught in foreign language teaching and having information about slang words and idioms facilitate the communication.

Keywords: Slang, teaching Turkish as a foreign lan

Vocabulary Teaching in Action-Oriented Approach

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The words are called as basic building blocks of language. It is impossible to discuss the language system without words. It is related to the vocabulary whether a language is rich or not. It is also related to the peoples' vocabulary to understand what is said and written or to express effectively their thoughts and their feelings verbally or in written way. It is needed to have a rich vocabulary to produce successful written works on various topics. Due to these reasons the word has been accepted a significant area of research; it has been studied on each period and it continues to be like this.

The vocabulary teaching-learning has a great importance as an integral component of language in foreign language teaching; because the words are the most essential building blocks in the development of all basic language skills. The people communicate mainly through the words. Without developing the vocabulary, we can not explain any subject; can not express ourselves both verbally and in anwritten form, or we can not understand what is said and written. It can be said that the first step of success is related to the vocabulary both in mother tongue acquisition and foreign language teaching. In other words, it is seen that the methods developed for foreign language teaching have given importance to vocabulary learning-teaching and have aimed at developing the vocabulary by different techniques and activities.

The main goal of the study is to answer the question ‘‘how can we be more successful in vocabulary learning-teaching?’’ The vocabulary learning-teaching can be realized by several techniques. The main techniques that can be used are the question-response, explication, brain storming, educative games, dramatization and role playing. The most common exercises and activities used are word memorizing, using synonyms and antonyms, word derivation, word matching, word puzzles, various word games, task completion and performing actions. As materials and tools, a lot of materials and tools can be said in vocabulary teaching. From course books to computers and mobile phones, from lyrics to advertisement products, from literary works to newspaper articles, from train ticket to registration form of a company, numerous materials can be used in vocabulary teaching. Besides, various images can also be used.

In this study, the place of vocabulary teaching is analyzed in foreign language education, the importance of vocabulary teaching in action-oriented approach and the methods and activities followed for word acquisition. The action-oriented approach gives great importance to vocabulary learning-teaching. However this approach adopts the principle of active and contextualized learning from holistic viewpoint in the activities teaching all learning skills instead of maintaining the vocabulary exercises and activities separately.

The study is a theoretical knowledge based on research. At the same time it is aimed to analyze two different course books in terms of vocabulary teaching towards the principles of action-oriented approach. As an example Alter Ego and Métro Saint-Michel are examined.



While vocabulary teaching is merely given in the activities of other language skills without giving any place to vocabulary teaching in the book *Alter Ego*, in the book *Métro Saint-Michel* the vocabulary teaching is continued at the part of vocabulary both based on the knowledge and the activities.

The main goal of vocabulary teaching must be to contribute the development of four basic language skills aimed at comprehension and production. While giving priority to teach basic words frequently used in daily life in accordance with the topics indicated in the Common European Framework of Reference for Languages, on the other hand the variability of words according to socio-cultural context must be adumbrated to the learners. Because of their role in communication and interaction, the words are brought to the fore in today's society. As a result, it is very important to realize vocabulary teaching by activities and social tasks focused on active participation of learners and by learning in context.

Keywords: Word, action-oriented approach, activity, active learning, context

Reflections on the Use of Technology in Classroom: the case of FATİH Project

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Educational environments that previously only made use of a blackboard and chalk have now been replaced by student-centric ones, rich with materials and supported by technology. To keep pace, Turkey has been implementing one of the most extensive technology and education projects in the World, namely the Fatih Project. The project aims at providing interactive boards and internet infrastructure to all schools from primary to high-school level and providing tablet computers to all secondary and high-school students and teachers. Within the scope of the Fatih Project, the objective is to equip 620,000 classrooms in 40,000 schools with Information Technology in order to improve educational opportunities and technology in schools for both teachers and students. This will inevitably lead to a number of differences in the educational environment. It is vital to determine these differences so as to ensure the effective implementation of educational activities. In recent years, numerous local and international studies have been conducted on the use of interactive boards and tablet computers in education. Studies on the use of these technologies in the classroom provide significant contributions towards developing the appropriate strategies for a more effective use of technology and to ensure these objectives for these investments are achieved. Certain situations in the classroom hinder the student from entering into the learning process. For this reason it is important to carry out classroom observations. Even though many studies have been conducted overseas on the use of tablet computers in the classroom, the number and the extent of studies conducted in Turkey on this subject is clearly insufficient. Studies on use of this technology in the classroom provide major contributions when developing the appropriate strategies for a more effective use of the technology and in ensuring the objectives of these investments are achieved. The objective of the present study is to reflect on learning environments enhanced with interactive boards and tablet computers within the scope of Fatih project. The changes of approach in the teacher's class preparation and in the behavior of both the students and the teacher in the classroom were examined, as well as the differences in teaching practices. Furthermore, the problems that occur during the implementation phase of the project were established. The research method used for this study was action research (researcher teacher). The researcher conducted the present study in a High School within the framework of the Fatih Project. The research data was gathered from video recordings, the researcher's journal and the researcher's observations. To this end, each teaching practice was recorded in a video format and the records were then analyzed. The study group comprised 10th graders from a High School in Giresun Province during the 2015-2016 academic year. In the learning environments enhanced with tablet computers, a need to change the sequence of gains occurred in a number of subjects. The students' communication with their teachers, as well as among themselves, was improved and it was also observed that some students, who did not participate in class in the conventional learning environment, showed more active participation. The technological problems encountered by students in the classroom, as well



as the activity based problems, caused students to move around the classroom, thus creating new levels of communication among some of the students, who previously had not interacted that much. A limited and slow internet connection, together with a lack of sufficient learning content, are some of the main problems that limited computer use for some of the students. Such problems hindered the motivation of both the teacher and the student, causing the students to lose concentration and focus on non-class-related activities. Also restrictions on accessing foreign internet sites, and the restraints of a foreign language, as well as the fact that certain contents required payment, appear to constitute the main barriers against the enhancement of the student's educational environment. The ability to deliver homework using digital media and the establishment of online communications between the teacher and the students, eliminated all spatial-temporal restrictions.

Keywords: Technology enhanced teaching, student and teacher behaviors, FATIH Project

Academic discipline:
Paper ID : 199

Misconceptions of Pre-Service Mathematics Teachers about Units Topics

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The way to keep place with today's knowledge and technology development should be to fill in the gaps that occur in the educational system. It will allow students to digress the rote learning by the necessity of learning why and how the knowledge tried to be taught in education system. Thus, it will allow the formation of qualified and permanent learning. It is made understand that interdisciplinary studies for qualified and permanent learning in education are needed. (Yıldırım, 1996). Interdisciplinary education is seen as an effective strategy with regards to bringing and using knowledge and skills together significantly belonged to different disciplines (Yıldırım, 1996). Teacher is the most important element of the qualified education. In addition, the ability of transferring knowledge of trained individuals is quite significant. Deficiencies identified in the strong relationship between Mathematics and Science in the educational process lead to failure of students. It can be seen at every stage that the knowledge taught in those lessons is interrelated. Knowledge and experiences of individuals in a course have supported to another course (Kaya et al., 2006). It is revealed to deficiency of knowledge in Math and transfer of knowledge in inadequate level in science, especially in physics. When national and international studies have been investigated, it is observed that there is a strong relationship between Math and Science and deficiency have revealed negative results correlatively. The aim of the study is to determine the difficulties of pre-service Mathematics teachers in dimensional analysis and units. The study group consists of 66 people, including 50 women and 16 men studying at nine different universities in 2015-2016. They were selected by easily accessible sampling method. Five open-ended questions were prepared by the researchers and literature. Then, they have been examined by Science teachers and professionals who are Phd candidates in Science and Mathematics, put into final form and implemented. The findings were coded independently by each researcher in order to increase the reliability and validity of the study. The responses of students were evaluated based on the scientific truths. The answers of the mathematic teacher candidates on questionnaire were analyzed via understanding level criterions as sound understanding, partial understanding, misunderstanding and no understanding. When findings are examined, it has been determined that students do not know basic magnitudes in SI unit system in terms of the answers of three questions of unit conversions and have problems with the transition between these units. Additionally, it has been observed that they have misconceptions in dimensional analysis. It has been demonstrated that pre-service mathematics teachers are insufficient in conversion of units and dimensional analysis.

Keywords: Transformation of units, dimensional analysis, mathematics, physics



Academic discipline: Foreign language education, grammar teaching, literary texts
Paper ID : 200

Using Literary Texts to Teach Grammar in Foreign Language Classroom

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Today it is impossible to think learning environment without technology and technological innovations. In fact, technological tools and materials have been used as assistant elements in learning environment for half a century, particularly in foreign language teaching. Especially with the internet, the learning environment is no longer limited only to the classroom and it has become more independent. Therefore, students have taken the opportunities to develop four basic language skills and grammar, vocabulary, phonetic competences thanks to many different exercises and activities outside the classroom in more independent and more individualized learning environment. Thanks to technological innovations in the language environment, today the place of grammar teaching is a debated subject in foreign language education. While the implicit grammar teaching is argued by some experts and grammar teaching is thought less important, other experts emphasize the importance of grammar teaching and they argue that the explicit grammar teaching must be maintained in foreign language education.

Within all these discussions and current approaches, the main purpose of the study is to determine whether grammar teaching is important in foreign language education. Many researches show that grammar instruction is an important step of foreign language teaching. Therefore, it is necessary to be taught in this process. Grammar instruction plays a significant role to develop comprehension and interpretation skills of students. One of the most effective course materials used to develop both reading and writing skills of students is literary texts defined as authentic documents. Using literary texts in foreign language classroom can be an opportunity to teach various grammar structures of foreign language in context and to internalize the grammar rules. However, the use of literature or literary texts in foreign language teaching has always been debated all over the world. Today, the experts still discuss the use of literary texts as a course material.

Therefore, it is discussed in this study that the use of literary texts in foreign language classroom as a course material isn't obligatory; but necessary due to the close relationship between language and literature. Although literary texts are accepted as authentic documents and do not have any purpose for language teaching, they are indispensable sources to be used for development of basic language skills. Here the purpose is not just to contribute to teaching basic language skills, but also to contribute to teaching the culture of foreign language and to provide different perspectives to students while teaching. McKay (2001) argues that the use of literary texts in foreign language classroom can provide three basic benefits: first it is important to achieve communicative goals, then it is an ideal resource to integrate the four skills and lastly it raises cross-cultural awareness. Literary texts are authentic documents that can be used at all levels. For example, tales and stories can be used as effective course materials for young learners in the foreign language classroom. Popular and classic novels and poems can be used by the teacher as assistant materials for adults in the classroom.



This study is a theoretical knowledge based on a research and it analyzes the use of literary text to teach grammar in foreign language classroom. The study consist of four parts: in the introduction part, foreign language teaching, the place of grammar in foreign language teaching and the use of literary texts in grammar teaching are discussed in detail. The second part discusses that it is necessary to use literary texts in foreign language teaching. In the third part, benefits that can be provided to grammar teaching with the use of literary texts are discussed. Finally, in the conclusion part, the points to take into account while using literary texts in foreign language classrooms are discussed and suggestions are put forward.

Keywords: Foreign language teaching, literary text, grammar teaching, course material



Academic discipline: Teacher education
Paper ID : 205

**The Application of Self-Assessment Dimension of EPOSTL to the English Language
Teachers in Amasya Province ***

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Teacher education is one of the important field studies needs to be emphasized in educational practices and researches. It also serves as an umbrella term including many concepts such as self-assessment, self-efficacy, self-confidence, motivation...etc. In this research, EPOSTL provides fundamental basis for EFL teachers' in determining the self-assessment levels of their own teaching process. Thus, this research is based on a mixed-type research design utilizing both qualitative and quantitative research approaches. For this purpose, the participants of the study were chosen among the EFL teachers working in Amasya povince during the spring semester of 2015-2016 academic year (N=70). The data collection instrument of the research was European Portfolio for Student Teachers of Languages (EPOSTL) which was adapted into a 5 point likert-type format coded as "weak", "adequate", "good", "excellent", "no idea" and graded as 1, 2, 3, 4, 5 respectively. The application of the scale intended to observe and specify the self-assessment levels of the EFL teachers. During the data analysis process, a series of one-sample T tests and paired-sample T tests were applied to the gathered data and the results were supported with the descriptive percentages and frequencies representing the EFL teachers generally and individually. The analysis of the gathered data reveals that EPOSTL is a kind of reflective tool which focuses on the qualifications of EFL teachers. Moreover, the application of EPOSTL unearthed the EFL teachers' needs to be developed during their teacher education. As a result, EPOSTL was turned into the scene of English language teaching as a necessary assessment tool to be used for specifying the qualifications of EFL teachers. This belief makes the appropriate use of EPOSTL possible not only for in-service but also for pre-service EFL teacher education.

Keywords: Self-assessment, EPOSTL, EFL teacher education

* This presentation relies on the findings obtained in the Scientific Research Project supported by Amasya University.

The Relationship between Leadership Styles of Primary School Principals and the Organizational Citizenship and the Organizational Silence Behaviors That Primary School Teachers Experience

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The aim of this study is to determine the relationship between leadership styles of primary school principals with the organizational citizenship behaviors and the organizational silence behaviors that primary school teachers experience according to the perception of teachers. It is a common thought that organizational behaviors are generally determined by the behaviours of the organization administrators. Especially, it is highly possible that the leadership styles adopted by the school principals identify the organizational citizenship behaviors of the teachers as well as the climate of the silence in the organization. When the related literature has been analyzed, it can be seen that the relationship between leadership styles of the school principals and organizational behaviors of the teachers in these organizations has been studied separately, but not a study which tackles these variables all together has emerged. This study is seen as important because it suggests a holistic approach. This research is conducted with relational screening model. The research model consists of three variables in total which are independent/external variable (the leadership styles of school principals) and two dependent/internal variables (the organizational citizenship behaviors and the organizational silence behaviors). However, the organizational citizenship behaviors variable is also at the position of mediator variable at this structural model. The population of the research includes 1756 teachers who work at 54 state primary schools at three different socio-economics level (low, medium, high) of Yenimahalle district of the city Ankara. Multi-stage sampling method has been used in order to determine the sample from the population. At the first stage, stratified sampling method has been used and at the second stage, simple random sampling method has been used. For these samples, 350 teachers who work at 30 different schools of the district of Yenimahalle have been reached. A questionnaire which includes three different data collection tools is given to these 350 teachers. 20 of the questionnaires were filled inappropriately and they have been left out. As the data collection tool, Multifactor Leadership Questionnaire, (Form 5X- Short) (MLQ), Organizational Citizenship Behavior Scale and Organizational Silence Scale have been utilized. MLQ was developed by Bass and Avolio in 1995. The permission to be able to use MLQ has been bought from the official website of it, www.mindgarden.com. MLQ consists of 45 items in total, but 36 items are included in this study. 36 items constitute 9 dimensions and these dimensions are contingent reward, intellectual stimulation, management by exception (passive), management by exception (active), laissez-faire, idealized influence (behavior), idealized influence (attributed), inspirational motivation, and individualized consideration. Organizational Citizenship Behavior Scale was developed by Basım and Şeşen in 2006. This scale consists of 19 items and all of the items have been included in this study. The third scale, Organizational Silence Scale was developed by Daşcı and Cemaloğlu in 2016. This scale consists of 5 dimensions (individual, administrative, organizational culture, colleagues and pressure groups) and 36 items, but last 6 items (1 dimension- pressure groups)



have been left out for this study. For the test validity of the scales, first and second order confirmatory factor analysis were conducted. For the analysis of the collected data, SPSS 21.0 ve LISREL 8.71 statistical software packages have been used. Also, Cronbach Alpha values were calculated and 0,90 for MLQ, 0,94 for Organizational Citizenship Behavior Scale and 0,91 for Organizational Silence Behavior have been found. The path model and the predictors are going to be revealed at the end of the study.

Keywords: Leadership, organizational citizenship, organizational silence, school principal, teacher

Academic discipline:
Paper ID : 215

Transition from Flow Diagram and Algorithm to Programming: Design and Development of a Dynamic Expert System Based Instructional Software

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Computer programming is generally defined as making computer fulfill some tasks by using programming language instructions. There are various programming languages according to the purpose of use, but they have generally the same function. Even though computer programming skill is basically regarded as “writing computer program”, indeed it can be regarded as a skill which requires using high-level thinking skills such as critical thinking, problem-solving and creative thinking.

There is an important relation between programming learning and algorithm learning. Current studies emphasize the importance of learning algorithm and flow diagram concepts. The primary operation for writing a program or solving a problem is not writing codes directly, but thinking how to solve the problem. This stage is the algorithm stage. It should be noted that it may be more informative and important to study on and design an algorithm problem consisting of a few symbols than pages of codes. It means that one who gets this logic handles with most part of the work. Then all that's left is to use instructions of the language which will be used correctly. In other words, in order to write program firstly algorithm should be created completely. It is not possible to expect an individual to become successful in programming who is not good at the algorithm. In this sense, the fundamental item of the programming learning is the comprehensive algorithm knowledge. This study deals with design and creation of a teaching software (DAP- from Dynamic Algorithm to Programing) in order to increase the success of students in algorithm and programming learning which can be used by all students, especially freshman students, who wants to improve himself in this field. DAP is designed as two modules. The first one was named as “free study module”, and the second is named as “expert system aided education module”. Qualities of each module are dealt with under subtitles.

Free Study Module: In this module students design and operate their own algorithm and they study freely. This part is designed as a learning environment on the basis of the constructivist approach. What a student can do while creating a flow diagram can be listed as follows:

Creating algorithm, recording, and opening (flow diagram) file

Operating flow diagrams at a speed chosen between 0 and 1 minus step by step and looking at results (slowing down and accelerating the transition among the blocks)

Operating and moving flow diagrams forward and backward with the help of “one step forward” and “one step back” buttons. Stopping or rerunning the flow diagram wherever he/she wants.

Creating C# , Java and Python codes of the algorithms dynamically which are the most popular programming languages (codes are produced by computer automatically)

Ability to watch the values of the variables on flow diagram wherever he/she wants.

Capacity to see code of any desired block specifically on flow diagram



Expert system aided education module: This part is the education module of DAP supported with graded questions created on an expert system aided basis. This module is a part where students fulfill the task given to them. An expert system includes questions graded in four categories named as linear, branching, loop and mixed which consists of the combination of these three. There are 28 problems as to seven difficulty level in each category. The difficulty level is graded from easy to difficult. The student will encounter with a question from another category. A question at average difficulty level for each category is given to students. If the student creates the algorithm of the question correctly and completes the mission he/she is led to the higher difficulty level. Unless he/she configures the question correctly, he/she is led to the lower difficulty level. In each case in which students are led to lower levels are provided with solution support for the creation of the algorithm. Students who complete the missions at low levels are led to higher levels again, hence as students complete each category, they are led to the next category with the same logic. The same structure is created in each category. If a student cannot create the algorithm even after several attempts, this case is recorded and he/she is led to the next question. The effectiveness of this software, DAP, on learning algorithm and programming will be evaluated by carrying out experimental researchers in further studies with it whose design and architecture are dealt with in this study.

Keywords: Algorithm design, flow diagram design, transition from algorithm to programming, dynamic teaching software

Academic discipline:
Paper ID : 216

Development and Evaluation of the Cooperative Learning Sheets for Mobile Programming

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The variety of programming environments has led to the birth of the mobile programming environments in recent years. Nowadays, mobile tools have become an inevitable part of our life and there has become a rapid progress from traditional programming environments named desktop programming through mobile environments. Along with the fact that mobile tools are increasingly taking their places in the world market and increasing need for mobile programming, the education of the personnel to be trained in this field is gaining importance. In terms of the training of the experts in this field which has become a giant market, besides the traditional programming learning, studies for a curriculum in different grades about the mobile programming learning specifically have picked up.

The advantages of the cooperative learning model can be utilized in mobile programming learning. The cooperative learning model is a student-centered model and students actively participate in the learning process in this model. According to Açıkgöz (2000), cooperative learning is a learning approach in which “students support each other’s learning about an academic subject in accordance with a common purpose by creating small mixed groups in the class environment and the group performance is rewarded in different ways”. The use of cooperative learning model in courses which are abstract and difficult to understand, such as programming course is seen as suitable.

In this study cooperative study Sheets to be used by the students taking Introduction to Mobile Programming course in Software Engineering Department of a university were created and evaluated by expert lecturers. Android was chosen as the mobile programming tool in the scope of the course. Android is one of the most common mobile environments and it still continues to progress. Android Studio Development Platform was used in order to produce the program for this environment. Test Sheets relying on the cooperative learning model were created for the Introduction to Mobile Programming course and the course was taught with the support of these sheets during a semester in the scope of the study. Each sheet was created as to include two or three applications by taking into consideration the time required for the completion of the application by the students. In this way, the Mobile Programming course was taught in accordance with the cooperative learning model with 14 sheets in total during a semester. In order to provide its suitability with cooperative learning model the qualities mentioned below were taken into consideration:

Creating cooperative group: Each sheet was created as to require the completion of the different application tasks in accordance with the cooperative group work and afterward exchange of views about the evaluation of applications among the groupmates



Individual Responsibility: Numbers of the steps in the application were kept at a high level in order to make the members of the group be active and take the responsibility for the application. Students were not informed directly at the steps of application. Instead, sometimes particular code pieces were given and group members were expected to discuss what these pieces mean and what their function are and fill in the explanation rows. Sometimes a sample code piece was given and group members were again expected to complete the other code pieces which would carry out the desired activity. Finally, evaluation parts were left blank at various steps within the application and at the end of the applications. These evaluations were expected to be filled with the view exchange among the group members. It is aimed to make each of group members to take responsibility for this application completion and evaluation structure used in all the sheets.

Group Members are Responsible for Each other's Learning: It is aimed to make the group members to take responsibility in each other's learning with the qualities such as not informing the students directly and completion-evaluation. Group members have to work together at any stage with regards to application and go further through the steps at sheets by fulfilling the desired task. Group members have to go further by taking into consideration the learnings of each other because each step goes further depending on the completion of the previous step successfully. Because when none of the group members has any opinion in further steps there will be a deadlock and that group will not go further in the application. For this reason, group members will have to go further by making explanations to each other at all stages.

Three experts' opinions were asked about the evaluation of the sheets in this study. These faculty members are experts in programming and they evaluated the use of sheets with this purpose. According to the results of the study, it is concluded that sheets produced in this structure may be beneficial for the students in terms of both cooperative learning and providing learning by experience.

Keywords: Algorithm design, flow diagram design, transition from algorithm to programming, dynamic teaching software

Academic discipline:
Paper ID : 217

Students' Views about Teaching the Database Management System Course in a Inquiry-Based Approach

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This study aims to detect the students' views about teaching the database management system course in a research-based way. In recent years, the emerging trend in the education system has been the acceleration of the transition from teacher-centered educational approach to student-centered educational approach. In this regard, several different technics and methods have been implemented. In student-centered approaches, students' intelligence and the qualities as a researcher are brought into the forefront, and the aim of such an approach is that the students have the responsibility for their own learning. Research-based learning approach is one of the approaches serving to this aim and it takes it as a basis that students learn through researching. Research-based learning approach can be used in engineering education in the sense that it makes students actively participate in the learning process, it gives the responsibility for learning to students and it provides important acquisitions to students. In terms of engineering as a profession, researching habit has an important place in both engineering education and professional life after graduation. Given that concept of lifelong learning has a big place in engineering, it is thought that use of this method will make a huge contribution to the researching skills of the students. In this regard, the problem sentence of the study can be created as:

- What are the views of the students about teaching the course of database management system in a research-based way?

This study aims to evaluate teaching the database management course in this way by taking into consideration students' viewpoints. The study was designed as an action research. The content analysis which is one of the qualitative research analysis methods was used in the study. The study was carried out in the 2015-2016 spring semester in software engineering department of a university. Database management systems course is the course of 3rd grade and it is a selective course. Interviews were made with 12 students taking the course. All of these students are the ones who took and passed the compulsory database and management course. Students who learned basic database concepts and structural questioning language faced with a content consisting of subjects at an advanced level about database management systems in the new course. Students were informed about the operation of the course at the first week. Afterward, students generated their own groups with two students. Subjects of the courses were shared among the groups as to each group will have two weeks and they organized a kind of work that will take 12 weeks. In this course designed as two-course hours students who are the responsible for the subject of the current week made their preparation (such as presentation, video) and presented at course. During the course, the person who is in the charge of the course attended to the course and he/she created a discussion environment after the presentations and a kind of discussion was carried out. A study was created in this way which takes 12 weeks. Interview form was used in the study as a data collecting tool. At



the end of the study, interviews were made with students individually. Data obtained from the study were analyzed with content analysis.

According to results of the study, there are positive views at an important rate about teaching the course in a research-based way while there are also, in a part, negative views about it. Despite the positive views such as giving research habit, permanent learning with students' own effort and research, taking responsibility in learning, there are also negative views such as taking a long time, confirmation of the information obtained during the research process. Generally, it seems that positive views are more than negative views. The results of the study show that research-based approaches can be used in engineering education effectively.

Keywords: Inquiry-based learning, student-centered learning, lifelong learning, database teaching, engineering education

Academic discipline:
Paper ID : 218

**Analyzing the Effects of Problem Solving and Critical Thinking Skills on Programming
Performance: The Case of Software Engineering Department**

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Programming skill is increasingly gaining importance in recent years led by the technological developments. Even if computer programming skill is regarded as the most important skill in the departments related to computer sciences, programming course is perceived as a difficult course and it generally, results in failure. There are several studies concluding that computer programming requires some high-level thinking skills pertaining to 21st century such as problem solving, logical and mathematical thinking. Even though there are also various studies analyzing the attitudes toward programming, the effect of programming self-efficiency perception on performance, we did not encounter with any study analyzing the relation between programming performance and problem-solving, and critical thinking. Detecting that whether there is a relation between problem solving and critical thinking can provide a new dimension and perspective to programming learning and teaching. In this regard the importance of this study is clear. This study was carried out with 53 students from software engineering department taking the introduction to programming and algorithm courses voluntarily participated in the study. In the scope of the study the problem sentence is expressed as follows:

- What are the levels of students' problem solving and critical thinking tendencies?
- Is there any relation between the performance in the introduction to programming and critical thinking course and skills for problem solving and critical thinking?

The study was carried out in the 2015-2016 fall semester and it is a descriptive study carried out with relational screening model. The sample of the study consists of 53 students in total who took Introduction to Programming and Algorithm course in Software Engineering Department of Technology Faculty of a university in Turkey and entered midterm and final exams. California Critical Thinking Skills Scale (CCTSS), Problem Solving Scale (PSS) and Programming Course Performance Points are used as data collecting tool.

California Critical Thinking Skills Scale (CCTSS): This scale is created by Facione, Facione and Giancarlo (1998) in order to detect the CTS level of individuals and adapted to Turkish by Kökdemir (2003). The factor validity and reliability analysis of Turkish form of the scale are carried out by Kökdemir (2003).

Problem Solving Scale (PSS): This scale is created by Heppner and Petersen (1982) in order to measure the problem-solving skill of an individual and adapted to Turkish by Şahin, Şahin and Heppner (1993).

Programming Course Performance Scores (PCPS) are used for measuring the performance of students in learning programming and algorithm. This score consists of midterm and final exams scores for the content of introduction to programming and algorithm course. Students' performance scores are calculated with the results of these two exams. The performance score is calculated with the scores of midterm (%50) and final exams (%50) for each student. The



obtained results are graded according to pass mark and letter grade practice of the university. As a result of this grading process scores are divided into levels as low, middle and high. The study was carried out in descriptive survey model. Data obtained from the study were analyzed in accordance with the research questions. For the first research question, students' scores according to CCTSS were evaluated and the lowest, highest and average values were calculated. Distribution of the students' score according to this scale was obtained. Then students' scores that they took from PSS were evaluated, and the lowest, highest and average values were calculated. Distribution of the students' score according to this scale was obtained. Finally, the relation between students' programming performance and critical thinking skills, and problem-solving skills were analyzed. According to the results of the study, there is an average relation between programming performance and critical thinking skills, and problem-solving skills.

Keywords: Programming performance, critical thinking skills, problem-solving, thinking skills

Academic discipline:
Paper ID : 219

Action-Oriented Approach in Foreign Language Teaching

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Programming skill is increasingly gaining importance in recent years led by the technological developments. Even if computer programming skill is regarded as the most important skill in the departments related to computer sciences, programming course is perceived as a difficult course and it generally, results in failure. There are several studies concluding that computer programming requires some high-level thinking skills pertaining to 21st century such as problem solving, logical and mathematical thinking. Even though there are also various studies analyzing the attitudes toward programming, the effect of programming self-efficiency perception on performance, we did not encounter with any study analyzing the relation between programming performance and problem-solving, and critical thinking. Detecting that whether there is a relation between problem solving and critical thinking can provide a new dimension and perspective to programming learning and teaching. In this regard the importance of this study is clear. This study was carried out with 53 students from software engineering department taking the introduction to programming and algorithm courses voluntarily participated in the study. In the scope of the study the problem sentence is expressed as follows:

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Keywords: Action oriented approach, method, acquisition, learning, foreign language teaching

**Action Oriented Method and Educational Software as Foreign Language Learning
Tools and Materials**

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There are many factors that affect success in foreign language education. Some of the factors can be listed as determination in accordance with requirements of the program objectives, better structuring of content, correct selecting of the methods and techniques to be followed, making use of appropriate tools and materials in activities related to skills development.

Today, increasing communication among people from various countries of the world, the development of information and communication technologies and widespread use of internet increase not only the need of foreign language learning, but also bring up different teaching and learning strategies, methods, techniques, tools and materials to the agenda. By 2000s, a new method called Action-oriented method especially beginning to be widely used in Europe has emerged for foreign language/ teaching. The main objective of this method is to be able to use the foreign language in social environments such as school, daily life and work life. This method in question foresees the integration of information and communication technologies to foreign language education. No longer just a textbook, such as audio or video recordings made for training purposes using traditional tools and materials is enough to sustain the foreign language education so today benefiting from the multimedia approach in teaching and learning tools and materials are adopted.

In the light of these developments, teaching materials, techniques, implementation of activities and exercises are performed by utilizing information and communication technology. Now, both in foreign language classes and in self-learning, multimedia tools and materials are as necessary as the need of textbooks at least. Web sites and educational software containing foreign language teaching / learning content are the result of these developments and requirements.

In this study, our aim is to investigate the software which has an indispensable importance of foreign language study and evaluate the software named *francaisfacile* as an example. The effect of success using information and communication technology-based tools and materials in foreign language education issue has been studied. In this study a method based on the resources and sample analysis has been followed.

The drastic change in the Internet, which provides an important tool in terms of educational software known as "education without walls" provides to sustain the teaching and learning activities without being bound to any venue. Through distance education is now provided by the Internet, it is not obliged to teach and learn at the same venue. Induction courses, tasks, activities and exercises can be carried out without any time limitation. Learner continues their education through websites and educational software whenever they want and how much they want. Only there is a necessity to stay connected to internet for synchronous lessons.



Through the sites contented with educational software, learning opportunities that can be sustained over the internet has made autonomous learning even more widespread. Most of the web software for foreign language education has designed in a way that learners can learn on their own and maximum attention has been given to their content configurations.

Instead of the traditional types of exercises for learning and teaching materials using various tools and different events are given in adoption to the tasks and actions. Because the active learning approach in teaching foreign languages in addition to educational materials produced, real life materials like from the announcements carried out in train stations to the news on Tv and internet is included in the learning process. In particular, while forums and blogs provide very important contribution to the learners' development of oral and written language skills, authentic documents also contribute to cultural development in the target language thus target language can be learned in a real environment in a social and certain context.

As a result, tools and materials used with language learning environments and facilities have important contributions as much as the strategy, methods and techniques followed in achieving the desired success in foreign language. In this context, it can be said that foreign language training software has a function that can respond to the needs of the era.

Keywords: Educational software, action oriented method, materials, learner, learning

**Investigation of Opinions on the Bologna Process of Prospective Teachers and
Academic Staff found in the Science Teacher Training Program**

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By researchers in order to improve the quality of education are being studied many different subjects. The addition of teacher candidates are expected to shape their lives according to the reflection of this research study. Teacher candidates' attitudes towards educational research plays an important role in benefiting from this study.

Higher education of the European Union at the beginning of the study comes to the Bologna Process has made to the development. This process started in 1999, some in the higher education system for the member states has necessitated the making of regulations. In this study, of starting the Bologna process in Europe, it is to determine the framework of the principles and practices to determine the level of implementation of the Science Teacher Training program in Turkey and teachers with their views on the subject of the teaching staff. taking the views of stakeholders, will provide clues about the process adopted was not adopted. It is also important to determine the views of the stakeholders in terms of expanding the availability of existing applications and continue. Science Teacher Training program, due to the structure of the applications that are affected frequently made at national and institutional levels. European Credit Transfer System, Diploma in areas such as ERASMUS and additional national and institutional levels in practice are reflected in the Science Teacher Training program. between Bologna Process in European higher education institutions in the context of studies aimed at building an education system accreditation. For this purpose, the content of the course, ECTS credits and workload has tried to be a certain standard.

In teacher education programs to better quality of life is the most fundamental aim of training more scientific ministers teacher. The case study method used in the research, qualitative and quantitative data collection tools are used together. Case study, a program of research, event, activity is expressed as a form of inquiry which investigated in depth (Creswell, 2009). Qualitative data was collected using semi-structured interview form, quantitative data collection tool is a questionnaire developed by the researchers. The questionnaire was administered to researchers via the internet. In addition, announcements were made in order to ensure continuous participation in social media. The sample easily accessible from the sampling method for determining the sampling method has been selected. Easily accessible from the situation for illustrative purposes sampling method saves speed and practicality research (Yıldırım and Şimşek, 2006). The working group of the study Turkey constitute 42 instructors and 211 teachers with various universities.

When the findings are evaluated; The participants of the great many students regard the benefits of the Bologna process, applied without adequate preparation and was defined as a process that enhances the quality of higher education. The instructors, in the implementation of the bologna process stated that the necessary preliminary information is important enough to be done.

The findings obtained from the research they do not have enough information to make the Bologna process participants and more detailed information about the process showed the need. In addition, our country is enough to adapt to existing universities age requirements and



is seen as necessary to complete the infrastructure work in this area. For this purpose, you need qualifications under the bologna process as well as the International qualifications and quality standards for student and teaching staff mobility should be increased, ECTS system on which more studies are necessary to expand the system intended to be done and information is an unavoidable reality. In university teacher training programs, quality units to make their accreditation procedures should be established and take part in this unit all process elements should be ensured. In this way, the strengths and weaknesses along the bologna process that would better have been identified and will be brought possible solutions. It should be noted that the validity of the bologna process by many countries in the world and is an internationalization move to improve the quality of education. The aim of this study was to reach the teachers and lecturers should be provided to inform more.

Keywords: Bologna process, teacher training, science

Academic discipline:
Paper ID : 223

Vocational School Students' Purposes of Facebook Usage

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In recent years, social network sites (SNSs) have rapidly spread among students, SNSs such as Facebook, Twitter, Instagram or Snapchat have exponential growth in membership. Increased effect of SNSs has brought important changes in the distribution of knowledge as well as in moving the frameworks of cultural standards (Manasijevec, Zivkovic, Arsic, & Milosevic; 2016). Numerous studies reported that the SNSs use in education has been increasing. According to the literature Facebook, a communication phenomenon, is the most popular SNSs among students (Duggan, Ellison, Lampe, Lenhard, & Madden, 2015; Sánchez Cortijo, & Javed; 2013, Manasijevec et al., 2016). Researchers have reported Facebook as a motivation tool (Mazer, Murphy, & Simonds, 2007), virtual learning environment (Won, Evans, Carey, & Schnittka, 2015), the “social glue” that helps students transition into college life (Madge et al., 2009), a medium to enhance students' career development self-efficacy (CDSE) (Argyris, & Xu, 2015). In addition, students' purposes of Facebook usage in college or higher education are also well documented (Ainin, Naqshbandi, Moghavvemi, & Jaafar, 2015; Manasijevec et al., 2016; Oncel & Tekin, 2016; Sendurur, Sendurur, & Yilmaz, 2015; Sharma, Joshi, & Sharma, 2015). However, limited research has been conducted on vocational school students' purposes of Facebook usage.

Therefore, the current study has focused on vocational school students' purposes of Facebook usage to better comprehend why students use Facebook and how they perceive the use of Facebook. The sample included 450 vocational school students enrolled in 20 technical program areas.

For the purpose, the researcher used a questionnaire that was completed by a sample of students at the Erzurum Vocational School, Atatürk University. The first part of the questionnaire consists of students' demographic characteristics. The second part of the questionnaire included “Aim of Using Facebook Scale” developed Mazman (2009). This scale consists of 11 items with 3 factors as “social relations”(7 items), “regarding studies”(2 items) and “daily activities” (2 items). Univariate analysis was performed to evaluate students' demographic characteristics and their attitudes regarding purposes of Facebook usage.

Findings indicate that students mainly use Facebook for social purposes. According to the results, Facebook is used for communication, sharing news and pictures and meeting new people rather than educational purposes. Statistically significant differences in purposes of Facebook usage based on gender were found. Females performed better on regarding studies factor ($t = 2.625, p < .05$), and males performed better on social relations ($t = -2.22, p < .05$) and daily activities factors ($t = -1.654, p < .05$).

Obtained results in this study could be very useful for future investigations of why students use Facebook and how they perceive the use of Facebook.

Keywords: Social network sites, facebook, purposes of facebook usage, vocational school



Academic discipline: Science education

Paper ID : 224

Exploring Pre-service Science Teachers' Self-efficacy Beliefs towards Use of Internet in Education

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The rapid changes in information technologies have been closely affecting societies. Nowadays, use of technology has become a need, rather than a luxury that only improves living conditions (Odabaşı, 2010). Countries undergo a set of transformations in order to meet these needs in their instructional programs. The Movement to Increase Opportunities and Technology project (FATİH) in our country is regarded as one of the movements towards this transformation. The fundamental objective in FATİH project involves improving technological infrastructures of schools, providing all students with equal opportunities, and creating learning environments, which appeal to more than one sense (Kurt, Kuzu, Dursun, Güllüpınar and Gültekin, 2013). One of the founding piers of this project is teachers. Likewise, teachers are the ones, who will instruct students through using technologies means such as interactive boards, high speed internet access, and educational e-content. Therefore, teachers are expected to possess certain knowledge, skills, attitudes, and values in order to effectively use these technologies. According to Baş (2011), teachers are supposed to possess self-efficacy perception towards internet use in education at an advanced level in order to succeed at educational activities, which they conduct in and outside the school.

Considering the fact that the path followed to reach information complies with technological advancements and that internet is one of the most frequently used methods to reach information; the researchers have been interested in examining for what purposes and how often teachers use internet. In their study, in which Akkoyunlu and Yılmaz (2005) studied prospective teachers' frequency and objective of internet use, they stated that majority of teachers accessed internet everyday with the aim of obtaining information and communication. Individuals' use of the means of internet to meet their educational needs is considered within the framework of using internet for educational purposes. In order to make use of these means, individuals are expected to possess high level self-efficacy perceptions towards educational internet use (Durmuş and Başarmak, 2014).

The aim of this study is to determine pre-service science teachers' self-efficacy belief levels towards educational internet use and to find out what variables affect these beliefs. The participants of the research consist of 300 voluntary pre-service teachers, who study at the department of Scienc Teaching in a state university in the Black Sea region. 88 of these students are first year students, 65 of them are second year students, 67 of them are third year students, and 80 of them are fourth year students. With the objective of determining self-efficacy beliefs of pre-services teachers towards educational internet use, "Educational Internet Use Self-Efficacy Scale", which was developed by Şahin (2009), was employed as the data collection tool of the study. The internal consistency reliability coefficient of the one dimension scale, which is 5-likert type and consists of 28 items, was calculated as 0.96 by the developers of the scale. The reliability of the scale was checked through the data retrieved via

the sampling in this study; the internal consistency coefficient (cronbach alpha) was validated as 0.96.

The study was conducted as a descriptive research. The data were analyzed through SPSS 17 package software. The data retrieved from the participants were analyzed via Saphiro-Wilks normality test, independent groups t-test, and variance analysis (One-way ANOVA) techniques. According to the results of normality tests applied to total scores obtained by the study group of the research, the Saphiro-Wilks value was found as .095 ($p>.05$), which was accepted as an indicator that the data were normally distributed. The results of the research suggest that the participants' internet use self-efficacy beliefs towards educational purposes is affected by their technological knowledge level, whether they have their own computer or smart phone, their weekly use of technology and internet access durations. It was observed that variables such as gender, economic status, and academic GPA do not have a statistically significant difference on the participants' internet use self-efficacy beliefs towards educational purposes. Moreover, 0.3% of the participants did not have sufficient internet use self-efficacy beliefs levels towards educational purposes, 6% of them had partially sufficient internet use self-efficacy beliefs levels towards educational purposes, whereas; 42.3% of the participants had sufficient internet use self-efficacy beliefs levels towards educational purposes; 44 of them had quite sufficient internet use self-efficacy beliefs levels towards educational purposes, and finally 7.3% of them had completely sufficient internet use self-efficacy beliefs levels towards educational purposes.

Keywords: Pre-service science teachers, internet usage, self-efficacy beliefs



Academic discipline: English language teaching, teacher education
Paper ID : 225

Developing the Self-Confidence of Prospective EFL Teachers via EPOSTL *

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Teacher education needs to involve many concepts such as self-efficacy, self-confidence, motivation...etc. Especially focused on self-confidence, it is defined as an individual's recognition of his own abilities, loving himself and being aware of his own emotions (Gençtan, 1984; Özbey, 2004). When the literature was reviewed it is seen that some researchers divide this term into two categories as intrinsic and extrinsic self-confidence which relates it more with the motivation issue of education. In this sense, self-confidence deserves to be investigated in teacher education. Considering these issues, this research aims to investigate self-confidence levels of prospective EFL teachers via European Portfolio for Student Teachers of Languages (EPOSTL) and enhance their self-confidence levels by sharing video recordings which include the details of EPOSTL. Moreover, this research is based on a mixed-type research design utilizing both qualitative and quantitative research approaches. So, it refers to descriptive and experimental research designs. For this purpose, the participants of the study were chosen among the prospective EFL teachers of Hacettepe University, Faculty of Education studying during 2014-2015 academic year (N=38). The data collection instrument of the research was European Portfolio for Student Teachers of Languages (EPOSTL) which was adapted into a 5 point likert-type format coded as "not developed", "less developed", "developed", "very developed", "fully developed " and graded as 1,2, 3, 4, 5 respectively During the data analysis process, a series of one-sample T tests and paired-sample T tests were applied to the gathered data and the results were supported with the descriptive percentages and frequencies representing the prospective EFL teachers generally and individually. The analysis reveals that EPOSTL is a kind of reflective tool which focuses on the qualifications of prospective EFL teachers. Also, the reflective features of EPOSTL makes it possible to be used for developing the self-confidence of prospective EFL teachers.

Keywords: Self-confidence, EPOSTL, EFL teacher education

* This presentation relies on the findings obtained in the PhD dissertation by Ayfer SU BERGİL

Investigation of Turkish and Japanese Education Systems in terms of the Parent-School Relationships

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The purpose of this research was to investigate Turkish and Japanese Education Systems in terms of the parent-school relationships. The legal regulations of Turkish and Japanese education systems were scanned and made inferences. A school may be good school if environment provides interest and support. If environment understands school, have a word in school's practices and parents work together with teachers, environment may support school (Grant, 1964, akt. Genç, 2005). Because of that efficient school-parent relationships may provide efficient schools.

Parent-school collaboration is one of the most important factors that effects student success. Also, family harmony, supportive family attitude and family participation to school activities effect student success positively (Çelenk, 2003).

It is seen that the participation of parents to educational activities is vital and necessary legislation is prepared in Turkish Education System. There are two legislative regulations about parent-school relationships in Turkish Education System. These are "Ministry of Education-Parent Teacher Association" and "Ministry of Education-Directive on Education Zones and Education Boards" (MEB, 1999; MEB, 2005). Parents have important duties about educational planning and execution. But it is not carried out all the schools similarly. Especially, committees which is desired to set up in educational zones are not functional and contributions of environment are limited.

Japanese society gives great importance to education. Because education is the only way to gain social and economic status for many students. In addition to school structure, cultural values, education methods, supports of parents is significant for japanese students' success in international exams. Particularly, mothers are called as -Education mom (kyoiku mama)- and give great importance to education. As a cultural value, japanese mothers dedicate themselves to their child and became their teacher and advisor. Parents want to do everything for their child's success. Besides, they pay large amounts of money to private institutions for making their children successful in entrance exams. (www.ncee.org).

There is The Parent-Teacher Association-PTA in Japan. These associations are similar to Turkish Parent-School Solidarity Associations. They have significant duties to provide participation of parents to school life. Mothers usually attend meetings. These associations help administrators to express school policies, to clarify expectations from parents, to provide fund for school activities. They seldomly contrast with school managers. In addition to meetings with parents, meetings with teachers are also done. Schools are not just a place where appropriate behaviours are learned, also punctuality, tidyness, clearness are learned in



Japanese education system. Therefore, support of parents is very critical for that behaviours' gained (Jabar, 2010; Knipprath, 2004).

Culturel values affect school-parent relationships in Turkish and Japanese Education systems. Mothers are key factor for these relationships in Japanese education system and they have some planning, organizing roles. But in Turkish education system, mothers and fathers together have some responsibilities. According to PISA 2012, Japan became 7th with 536 average points and Turkey became 44th with 448 average points (MEB, 2015). Parents supportive behaviours are one of the most important factors in success of Japanese students. Because of that in Turkish education system, parents' support must be real rather than becoming only obligatory responsibilities.

Keywords: Turkish education system, Japanese education system parent-school relationships

Academic discipline:
Paper ID : 236

The Effect of Stem Applications on Perceptions of the Students towards the Science and Engineering

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This study aims to determine the effect of STEM applications on perceptions of students towards science and engineering. Therefore, this study has been conducted on 27 students in 7th grade from a secondary school in the city centre of Samsun. In the study, the one group pretest - posttest design has been used. During the process of STEM applications within the scope of the electricity energy unit, an “Engineering Perception Form”, which includes 12 open-ended questions, and a “Demographic Knowledge Form” have been used as data collection tools and they have been analysed and evaluated afterwards.

While the people always want more and the better in the fast-changing world, the importance of the engineering in technology and product development comes forward. The engineering is a profession that incorporates innovation, change, development, creativity, imagination and also art. However, the accomplishment of these characteristics in the context of product development and technology depends on the scientific education and this criterion definitely needs to be taken into consideration during the scientific education. 21st century skills such as creativity, critical thinking, problem solving, cooperation, which are compatible with engineering skills, bring the cohesive STEM education into the forefront. STEM education is rapidly accepted throughout Turkey and the world. In United States of America, a budget for STEM education has been reserved since the year of 2012. STEM is an education form consisting of Science-Technology-Engineering-Mathematics together. The aim of the STEM education is to raise individuals that have skills necessary for our age and to become a country having a leader economy of the future.

As a result of data analyses, it can be said that the students’ engineering perceptions have changed, they could have defined the term of engineering more correctly, could have enumerate of engineering types easily. Moreover, it has been determined that the students, who have been never interested in the field before, started to be interested in the engineering profession. Many students have expressed that they feel themselves like engineers during the applications and appreciated the STEM applications. The students started to predicate the elements of engineering design process at the end of the applications and also they could enumerate the stages to be taken during the product design by the engineers. Besides, it has seen that the students could reveal the close relationship between the Science-Engineering-Technology concepts and express the importance of the engineering for the science. The students have realised that the science constitutes a resource for knowledge based engineering and the importance of the relation between science and engineering in the technology production. At the end of the study, it has been determined that there is no relationship among the students regarding the demographic features such as socio-economic class, gender, educational background of their parents, and number of siblings. It has been designated that



students exhibit positive attitudes on enlightenment, interest and perceptions despite their different characteristics.

The results show the importance and contribution of the STEM education to the engineering knowledge. The students have satisfyingly succeeded in use of knowledge, product development and conversion of information into a product. It is recommended to allocate financial recourse for STEM applications at schools, which will provide students with the experiences in the sense of production, gaining handcraft, taking responsibility and sharing, and to encourage students and teachers.

Keywords: Science education, STEM, engineering

Academic discipline: Teacher education, early childhood teacher education
Paper ID : 238

**Using Video Analysis to Investigate Early Childhood Education Pre-service Teachers'
Reflection Skills**

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Reflection and self-evaluation plays an important role in teachers' professional development. Teachers' ability to evaluate their own practice is the key teacher competency to assure improved classroom practices (Darling- Hammond & Richardson, 2009). The reciprocal relationship between teachers' knowledge and reflection skills can also be used as a tool for continuous professional development. Reflection skills allow teachers to build meaningful and deeper knowledge of their profession, and the knowledge acquired through reflection also improves teachers' perception of their profession and allows them to gain better reflection and self-evaluation skills. For pre-service teachers to develop effective reflection skill takes a significant amount of time. Developing sophisticated reflection requires broad understanding of the structure of knowledge in general and constructivist nature of teacher knowledge (Moon, 2004). To help pre-service teachers to become reflective teachers, teacher education programs should provide opportunities for them to practice reflection skills and understand what it means to be reflective and how they should use these skills to improve them (LaBoskey, 1995). Reflective teachers' ability to pay attention to underlying causes for classroom outcomes and to perceive these outcomes from a multidimensional perspective is what we aim for the future in-service teachers.

Technological developments enable teacher education programs to utilize numerous aids to enrich novice teachers' pre-service experience. Visual aids, especially videos are one of the most popular technological tools pre-service teacher education programs use. Videos can be used to demonstrate different teaching strategies with various content areas and in active interactions with students (Hatfield & Bitter, 1994). Video can also be used to illustrate particular classroom processes. They could allow teacher educators to show pre-service teachers how certain discursive construct of different problem solving strategies are being received by students (Corvin, Price, & Storeygard, 1996). Videos can also be used to develop pre-service teachers' reflection skills, by enabling them to observe their own practice and evaluate their performance from an outsider perspective. All these approaches are specifically focus on helping teachers learn what to do in the classroom.

This exploratory research investigates the reflection skills of early childhood education pre-service teachers' during a self-video analysis activity. By doing so this research aims to identify which reflection skill pre-service teachers are more incline to use while analyzing their practice videos and which reflection skills are omitted. In order to help pre-service teachers to develop better reflection skills by using technological aids, it is necessary to understand the strength and weaknesses of pre-service teachers' reflective processes.



Therefore to understand these processes 174 pre-service teachers were asked to reflect on their short teacher practicum videos which were shot as a part of pre-service teachers' mathematical development and instructional strategies course. All the participants provided written reflections of their practice based on their analysis of short personal video segment. Collected data will be analyzed by using content analysis methodology. Content analysis method can be use in either an inductive or deductive way. In content analysis if there is not enough former knowledge about the phenomenon the inductive approach is recommended (Mayring, 2004). Therefore this research will follow Mayring's (2014) steps of inductive category development. Independence of research result from researching persons is the most important reliability concern for the content analysis. This inter-coder reliability issue will be handled by establishing an intra-coder agreement as Krippendorff (2012) suggested. At least two coders will code the researched text and before the coding of the whole text, all coders will use the intra-coder agreement test to assure stability.

This research aims to identify early childhood education pre-service teachers' reflective skills especially the ones that they employ while evaluating their practicum video segments. Since videos allow pre-service teachers to evaluate their own practice from an outsider perspective, we expect them understand what they experience in the practice might not be what they assumed as the participant of the practicum experience. It is possible that with the aid of the video segments while certain reflection skills were supported some reflection skills might be overlooked or omitted all together. By identifying these different attributes of the pre-service teachers reflection processes this research also aims to contribute to the foundation for reflection oriented teacher education practices which are informed and enriched by technological tools.

Keywords: Reflection skills, video evaluation, early childhood teacher education

Academic discipline:
Paper ID : 239

**The Effect of Portfolio Application and Proper Course Plans for Learning Styles on
Students' Attitudes towards General Biology Laboratory Course**

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The use of alternative methods of measurement and assessment has become almost obligatory because of the differences in learning styles. The assessment of students has much broader meaning than responding to a series of test questions. The measurement and assessment is not a task which is given marks to students after exams. For this reason, a new approach should be adopted also for measurement and assessment and also should give place to different assessments such as portfolio, concept maps, structured grid, branched diagnostic trees, projects, interviews, posters, group and peer assessment, self assessment into an effective training and education process on frame of reconstruction.

In this study, learning styles of science teacher candidates via Kolb Learning Style Inventory (KLSI-3) have been determined, then proper General Biology Laboratory course plans have been structured and teaching activities which would be evaluated by using portfolio have been developed. The aim of the study is to investigate the effect of courses in the line of these course plans to teacher candidates' attitudes towards biology lesson.

In this study quantitative methods has been selected. This study has been conducted by using pre-post and control-experimental design of quasi-experimental design models. The control and experimental groups were chosen randomly between three classes in the Education Faculty. 100 candidates from Ondokuz Mayıs University Science Teacher Education Department have been the sample of the study. 35 of them have been in the Experiment-1 group, 32 of them have been in the Experiment-2 group and the control group has indicated 33 candidates. Study has been continued for 20 weeks. In the control group, laboratory course has been carried on traditional teaching methods while experiment-1 group has been treated by portfolio applications. In the experiment-2 group, the courses have been sustained with 20 General Biology Laboratory course plans specialized for each week, proper for learning styles and structured by the researcher. Study has been lasted 40 hours, 2 hours per week and completed in 20 weeks.

In the study "Biology Attitude Test" and "Kolb Learning Styles Inventory" have been performed as pre tests and post tests to whole group. It has been concluded that the applications had been more positive effects at these two experimental groups students' attitudes towards biology. Before as pre test result, there has been no meaningful difference between all groups by the means of biology attitude. But after the application, there have been meaningful difference between control group and both experimental groups. And also there has been no meaningful difference between the two experimental groups by the means of biology attitude. According to the post test results for Biology Attitude Test, the two experimental groups' attitude was higher than control group. It has been concluded that the applications had been more positive effects at these two experimental groups students' attitudes towards biology



Keywords: Portfolio, learning styles, biology education, biology attitude

Academic discipline:
Paper ID : 242

**I'm Learning & Teaching Festival; a Digital Media Enhanced, Student Centered
Activity in Second Class Elective Courses at Ondokuz Mayıs University Medical Faculty**

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The use of digital media is gradually increasing since it facilitates teaching processes and contributes to learning; however, it is also considered as an internal threat for professionalism. It is thought that this perception will be changed when the outcomes are specific, digital media are used in correct ways and there is a supportive and collaborative environment.

Three eight-week elective programs are carried out by Ondokuz Mayıs University Medical Faculty at the second grade, which are Medical Turkish, Medical English, Communication with the Hearing-Impaired and Turkish Sign Language, Individual-Society and Physician, Sports Medicine, Neurophysiology, and Physician Roles. These programmes are designed with a multiple approach through the eclectic combination of behaviorist, cognitive and constructivist theories. Each week has a theme in three-week programmes. The theme of the last week is common and in this period, the students prepare products appropriate to the aims of the programme and present their products in forms of posters or videos in the "I'm Learning & Teaching Festival". The purpose here is that students reconstruct what they have learned within their mental structures, share/teach it using a different way, and have a new learning experience while teaching.

This paper is about the technological inclination in the learning-teaching behaviors of students. The opinions of students about the festival and their products were analyzed through qualitative analysis method.

Festival consists of three stages.

Stage of creating problem: The students are split into groups according to their areas of interest, and determine a topic and method by discussing what they will produce within the scope of the festival.

Preparation stage for small groups: After the topic and method are decided on, the groups work on their products during the working periods and at times they designate. The educators in the elective programme guide the groups about their making use of technology and human resources as well as in intellectual terms during the preparation period.

The festival stage: All the academic staff, students and personnel are invited to the festival. The invitation text and poster are prepared by the students and one student chosen from among the groups makes the festival presentation.

According to the constructivist learning approach, when one obtains a new piece of knowledge, he/she modifies the scope and qualities of the preexisting knowledge, and behaves in accordance with the requirements of new experiences. Knowledge that is assimilated differently is unique to the person and this process is active for student. Digital media is indispensable today for the efficiency and effectiveness of teaching-learning processes and students are expected to make use of technological sources in the constructivist model approach.



172 products were presented in our festival, which was organized twice a year as the spring and fall semester starting from the 2013-2014 academic year. 79 of those are poster presentations, while 93 are video shows. Various technologies such as computer, internet, mobile phones, video camera, storing devices and video and sound recording-merging programs and software and statistical programs like PowerPoint, Word, Prezi and SPSS were used in preparation and presentation of the products.

The chosen video and poster works can be viewed on the Facebook page <https://www.facebook.com/ogreniyorumogretiyorum/>. Moreover, students can publish their own products on various channels like YouTube.

The students who found the activity enjoyable and educational expressed their achievements under headings as motivation, creativity, team work, sociability, leadership and culture. The festival is of great importance in terms of observing the biopsychosocial viewpoint that the students acquired, understanding and identifying how well they could embrace the concepts of social responsibility, justice and effectiveness, and planning their developments throughout the years. While the students improve their skills through team work, they have an enjoyable time, thus an educational opportunity is created that is suitable for next-generation learning characteristics. It has been experienced that when used properly, digital media is a tool for medical students to obtain medical professionalism competence which encompasses altruism, honesty, compassion, patient care principles, communication skills, ethics and moral principles.

As the teaching staff who know that technology is a significant part for the life of the new generation, our purpose should be to train creative medical students who use technology actively in acquisition, processing, usage and feedback of knowledge.

Keywords: Learning, medical student, creativity, digital media, technology

Academic discipline: Instructional technology
Paper ID : 243

**Examining Different Variables of TPACK level of Teachers Who Attending the Fatih
Project Interactive Classroom Management Course**

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An important requirement of today's society is to train of qualified individuals who have 21st century competencies. To ensure this requirement, it is necessary to keep the lens to teachers and their qualifications. The view of teachers' competences have been transformed in time evolves of community needs, theoretical studies and technology.

"Pedagogical Content Knowledge" concept was born with dimension of "field (content) knowledge" combined with the dimension of "pedagogical knowledge". "Technological pedagogical content knowledge (TPACK)" concept has been emerged dimension of "technology" by adding to the concept of "Pedagogical content knowledge".

Educational institutions to be equipped with technology alone does not bring success in education. First of all, It must be determined whether teachers use effectively technologies that provided to them or not. The studies on this subject in the literature show that teachers don't enough competence how to use technology effectively in the classroom, daily life and academic purpose. In this study, it was investigated that technological pedagogical content knowledge of teacher who attended the Fatih Project Interactive Classroom Management Course that In order to increase the technological competence of teachers and improve teachers' knowledge and skills of the technology integration in education.

As of the year 2012 "Using Technology in Education" courses have begun to increase technology literacy teachers, to improve their knowledge and skills of technology integration in education in scope of FATİH project. This in-service training course has been held as the remote education under the name of "Fatih Project Interactive Classroom Management Course" since January 2016. In the framework of this research, it was aimed to evaluate the different variables of Technological Pedagogical Content Knowledge level and to determine level of Technological Pedagogical Content Knowledge of teachers, in different branches, who attended the Fatih Project Interactive Classroom Management Course.

The study group was consisted of 25 teachers, in different branches, who attended the Fatih Project Interactive Classroom Management Course and working in a secondary school in Ankara in 2015-2016 education year. 72% of teachers are female and 28% male. When analyzed in terms of age distribution, 52% of participants are among the highest rate 40-49 years. In this study, " Teachers' Teaching and Technology Information Scale", which developed by Schmidt, Baran, Thompson, Koehler, Mishra and Shin (2009), adapted into Turkish by Kaya, Kaya and Emre (2013), was applied to participants. In this study that used relational model, the data were analyzed using frequency, percentage and univariate ANOVA. In this research was carried out with teachers in a middle school where is located in the district of Altındag, in Ankara. Teachers took the Fatih Project Interactive Classroom Management Course from the EBA (Eğitim Bilişim Ağı [Education Information Network]) within a period of 10 days. It was given the opportunity to teacher for apply their knowledge



in classroom period of two weeks, after the in-service training course. The goal here is to provide the vision about their Technological Pedagogical Content Knowledge levels. After the implementation, Teachers' Teaching and Technology Information Scale was applied in the online environment to participants.

As a result of the study, teachers were scored at a high level from sub-dimensions of "Knowledge, Pedagogical Knowledge, Pedagogical Content Knowledge". In addition, teachers received intermediate scores from sub-dimensions of "Technological Knowledge, Technological Content Knowledge, Technological Pedagogical Knowledge, Technological Pedagogical Content Knowledge". Significant differences was found between between scores levels from teachers' teaching and technology information scale according to the variables of branches and levels of service time.

Keywords: TPACK, FATİH project, technology integration, in-service training

Academic discipline:
Paper ID : 245

**Determination of the Course Process and Usage Purpose of the Tablet PC by Students
Distributed in the FATİH Project**

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Nowadays which the ordinary of access to technology in daily life, technology integration environment has become a necessity, not a preference in teaching and learning. There are many factors affecting the integration of technology in teaching and learning environment. Some of these factors might be listed as teacher attitude, the teacher's technology literacy level, learning environment, need for counseling and technical support, access to technology. Ease of access technologies mentioned herein is an important factor. However, easy access to technology does not guarantee the effective integration of technology in the learning process. In this context, the focus of this study is constituted that tablet computers distributed to high school students within the scope of Fatih Project has determined that students use tablet pc for cases in the teaching-learning process and for what purpose they are used it.

Equipping of educational environment in terms of technological tools constitute a variety of opportunities for the use and integration of technology in lesson processes. For this purpose, within the scope of Fatih Project which was started in 2012 in Turkey, interactive boards were established in classes and tablet pc's were distributed to students. this study can offer a perspective as for what purposes were used tablet computers, which distributed for educational aims, by learners.

The aim of this study was determined as to examined that student' tablets are intended uses on the course and outside the classroom by students.

The study group consisted from the 10th and 11th grade students of two Anatolian High School in Ankara and Çorum in 2015-2016 academic year. 58 volunteers students joined from different grade levels to this study. Data which in the scope of the research was collected through "Tablet pc useages survey". Tablets usage survey is composed of three parts. In the second part of survey, it is located items which related to intended uses of tablet computer in the courses and outside the classroom. In the last part of the survey it is located open-ended questions to determine students' opinions which toward the use of tablets in course. Questionnaires was administered to the students on paper and online.

According to the results of study, it is understood 39% of students used tablet pc 4-6 hours , %36,5 of students were used 7 hours and up in per day. Accordingly, it can be said that the students are interact intensively with tablet PCs .

Students have used tablet PC mostly to listen to music (%60.3), to do homework and research (%53.4), to play games (48.3), to watch video (%46.6) and to navigate the social media (%39.72). According to this finding, students have used tablet computers for a variety of purposes. One of them is also educational activities.

81% of participants to the question about tablet use cases in courses gave the answer that they is not use tablet PC in class. In addition, when learners' opinions are examined it is seen that come to the forefront the perception of course process does not require the use of tablet PC.



Furthermore, it can be said that a part of the efforts related to the use of tablets in class lessons have failed for reasons such as the intensity of the course program, classroom management problems and access problems.

Keywords: Tablet PC, technology integration, FATIİH project

Academic discipline: Mathematics education, student experience in using technology while doing homework

Paper ID : 248

Computer-Assisted Performance Assignment Experiences of 8th Graders

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Against a background of a substantial number of approaches to assessment and evaluation, Turkish education system had seen the introduction of new approaches to assessment and evaluation with the education programs put in place from 2005-2006 academic year on. Such approaches which are deemed alternative means to assessment enable the evaluation of the product, as well as the process (Herman, Aschbacher, and Winters, 1992). One such alternative method of assessment and evaluation, performance evaluation, should be applied to oversee educational practices to enable the student for using knowledge in real-world environments (MEB, 2013). Among the means used for performance assessment, performance assignments, stand out as activities requiring the student to exercise and develop skills of critical thought, problem-solving, comprehension of texts, use of creativity, and research, and thereupon present a product of such skills (Çiftçi, 2010). On the other hand, in light of the ever increasing emphasis on the effective use of information and communication technologies within the framework of developments in technology and education programs, the importance of computer-assisted teaching became ever more pronounced at Turkish schools. For the students can reinforce what they learned, and achieve a more effective learning through computer-assisted teaching/learning activities (Akdağ and Tok, 2008).

In this context, the objective of this study is to try and find out how the computer assisted performance assignments help 8th graders in terms of their mathematics learning and computer use skills. The present study is essentially a case study within the wider domain of qualitative research, and was carried out with 45 eight graders enrolled in three classes of a private school in Ankara, in academic year 2012-2013. The basic premise is about the design and presentation –as a performance assignment– on an individual basis, of a mathematics topic they had previously learned in the 8th grade mathematics course, using one of the software they had learned in the Computer Classes (Powerpoint, Movie Maker, Excel, and Adobe Photoshop). Within the framework of this process, the students spent 4 hours out of a total of 10 with research and assignment preparation at the computer laboratory, while the remaining 6 hours were used for content creation at the classroom. The mathematics teacher had accompanied the students through the process, and provided them guidance whenever required. The students' views developed through the assignment were then asked in an open-ended questionnaire.

The study found that the majority of the students used Powerpoint to prepare the assignment, while the favorite topics were probability (42%) and fractals (38%). It is understood that 30 students did not learn anything new during the preparations for the assignment, while 6 reported learning about a new matter during the work for the assignment. 2 among these reported to have learned rational numbers better when doing research on probability. In a



similar vein 2 learned more about proportions when researching fractals, 1 learned about problem posing when investigating probability, and 1 improved herself in patterns and associations when engaged in research on fractals. Moreover, 4 of the students noted that they learned about the topic they had been researching better; 3 reported coming across interesting examples they had not seen during the class.

27 of the students reported learning how to use animations in Powerpoint; 11 noted that they did not learn anything new compared to what they already learned in the Computer Classes; 7 reported that they learned how to group objects in Powerpoint; 3 noted the acquired ability to express mathematical notations in computer environments; 2 said that they learned how to use Movie Maker; 1 reported learning how to add photos, coupled with 1 learning creating links, and 1 learning to prepare themes in Powerpoint.

The students noted that the assignment was more effective and helpful compared to the conventional mathematics courses; that the assignment was enjoyable and fun; that it contributed to the furthering of one's command of mathematics. On the other hand, some argued that it led to a waste of time during the classes. Moreover, the students reported that the assignments helped improve their ability to establish linkages between the daily life and mathematics. They specifically referred to the assessment of probabilities in National Lottery draws, history of fractals and fractals in the nature, realizing the connection between the ornamentation in daily life and the geometry of transformations, and noticing the histograms witnessed in daily life.

Keywords: Computer assisted instruction, performance homework, mathematics course, 8th grade

The Slow-motion Technique in Science Teaching

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It is known that the usage of technological materials in science courses is beneficial for the learning process in education. According to Ekici and Ekici, 2011, a proper method and an efficient learning process should be created to get involved students to this process actively by using technological devices. Animation supported lessons can be shown as an example method of using technology in classes. This study consists of the meaning of the animation, using it in science teaching, upcoming of the slowmotion technique, the steps and the studies about the slow-motion techniques. Moreover, features advantages and disadvantages of the technique are explained. Through the animation gives the objects dynamism, the teaching activities become more effective (Koç, Şimşek ve Has 2013). In particular, the use of animation methods for science courses which is in the majority of abstract concepts makes it quite clear learning for students (Daşdemir, 2006). According to Hoban (2005) animation preparation process can be expressed as planning, drafting, creation, rebuild. At the planning stage, the draft is created after necessary research on the subject. Music, sound and text or other kind of multimedia can be added creating the animation during the process. According to the literature, the advantages of a slowmotion technique are; to develop students' skills, to make students active in the learning process, to be able to be used in every educational level, to make the science understandable, and to be able to prepared in a short time. The disadvantages of a slowmotion technique are; to be expensive because of the need of technological devices such as camera, computer and tripod, the difficulty of practicing in crowded classrooms, students' inability to create ideas for sketches and models necessary for the process of creating animation (Ekici and Ekici, 2011). Although the first practices of slow-motion techniques in teaching may seem as compulsive or time consuming, more efficient results in terms of learning can be achieved after a few attempts if it is used properly. For this reason, the slow-motion technique can be recommended in science lessons for

Keywords: Animation, slowmotion, science teaching, technology



Academic discipline:
Paper ID : 252

**An Examination of Songs Making It to the Finals in TRT's Popular Nursery Rhymes
Competition in terms of Values Education**

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Since education is a system, which eventually enables individuals to improve themselves from various aspects, it should be qualified enough to not only meet the cognitive needs of students but also their affective and emotional needs (Batdı, 2012). It is believed that music and songs have an important place in addressing the affective dimension of education. The relationship between children and music starts in the womb (Özdemir & Yıldız, 2010) and continues after birth with lullabies and the songs they hear in the streets, everyday life, and education. Nursery rhymes, which evoke emotional feelings in children thanks to their structure, play a significant role in this process. Since humans live in harmony with music and songs almost in every field of life, they are naturally closely related to the subjects discussed in songs. Therefore, it is important that humanitarian values be included in nursery rhymes. "Popular Nursery Rhymes Competition", which has been organized by TRT (Turkish Radio and Television Association) ever since 1993, is an effective competition to the production of nursery rhymes in music literature. This competition has been organized on a regular basis (1993, 1995, 1998, 2000, 2002, 2004, 2007, 2009, 2011, 2013, 2015); after the initial elimination, 10 songs are selected to compete at finals.

The aim of this research is to find out which humanitarian value conceptions are usually preferred in the songs, which are left for the finals in TRT's Nursery Rhymes Competition and to determine how often these conceptions are used in these songs. For this purpose, we sought answer to the question: "Which values are included in the lyrics of the songs, which made it to the finales in TRT's Popular Nursery Songs Competition and how often these values are included in these songs?" To find the answer to the aforementioned question, 110 songs in total, which made it to the finals in 1993, 1995, 1998, 2000, 2002, 2004, 2007, 2009, 2011, 2013 and 2015, were examined to see if they had any of the values, which were included in the Ministry of National Education Directive and divided into 27 categories.

In this study, qualitative research model was employed; the data were retrieved through document analysis method and analyzed via descriptive content analysis method. Document examination is also called as documental survey, which collects data through examining existing records and documents (Karasar, 2005). Content analysis is bringing similar data together within the framework of certain conceptions and themes and interpreting them through organizing them in a way, which allows readers to comprehend (Yıldırım and Şimşek, 2006). In a general sense, these can be divided into three including meta-analysis, meta-synthesis (thematic content analysis), and descriptive content analysis (Çalık and Sözbilir, 2014). Moreover, which values are included and how often they are included were determined through frequency analysis; the results were presented based on years in the tables with their frequencies and percentages. In the process of data collection, the local and foreign publications about values education were scanned, related books were supplied, periodicals

were tried to be obtained, and current studies were followed. Moreover, the nursery rhymes that were examined were retrieved through the official website of TRT. Based on the Values Education Directive of the Ministry of National Education, we found out which songs discussed which of the 27 values included in this directive. The data were evaluated by two researchers. In order to ensure the reliability of the study, agreement percentage formula, developed by Miles & Huberman (1996:64), was used.

The findings suggest that the most frequently discussed values in the nursery rhymes were love and optimism; the values such as sensitiveness, solidarity, respect, and aesthetics were also often included in the lyrics of these songs. In addition, values such as courage, leadership, cleanliness, mercy, friendship, and sacrifice were rarely observed in the songs; conceptions such as empathy, justice, attaching importance to family unity, preserving cultural heritage, hospitality were not included in these songs. This study is of significance in that it presents how the values, which are one of the important items of the acquisitions in education at an affective level, are included in nursery rhymes and also due to the fact that there are only few studies in this field. Raising children, who have high humanitarian values, is one of the most outstanding duties of educators. Therefore, it is suggested that teachers use nursery rhymes, which focus on humanitarian values, in their lessons, and more importance be attached to including humanitarian values in nursery rhymes.

Keywords: Nursery rhymes, songs, education



Academic discipline:
Paper ID : 254

**Development and Validation of TPACK Assessment Instrument for Preschool Teacher
Candidates**

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In the 21st century also known as information age, when the speed of information production and consumption has accelerated, meeting the various needs of children has become quite a challenge for parents. Within that text, the significance of preschool education has become undeniable. Being the most critical time period for individuals as a result of leaving permanent marks on one's life, the preschool education is a treasure consisting of information that is valuable and significant for children for the rest of their lives. The information, habits and skills presented to the children are directly related to the qualifications preschool teachers have and their ability to improve themselves. The training preschool teacher candidates receive on the technologies they will use in their courses and the competences they possess in this field have been a starting point for researchers in the recent years. There are various approaches for technology integration in the learning-teaching process of both teachers and teacher candidates. One of these approaches is Technological Pedagogical Content Knowledge (TPACK), which is defined by Mishra and Koehler (2006). TPACK deals with skills of teachers such as harmonizing and using instructional technologies with their content knowledge of the subject and technological knowledge as well as bringing these technologies to the class at a level that is compatible with children. In the literature there is no instrument to assess TPACK, which preschool teacher candidates can use to evaluate themselves in integrating technology into their lessons in science education.

The aim of this study is to develop an assessment instrument to determine the preschool teacher candidates' technological pedagogical content knowledge for science education. The literature was reviewed for this purpose and the scale consisting of 29 items was prepared by the researchers. The statements on the scale started from 1 (I do not know at all) to 5 (I know very well). This scale was administered to 410 students in total, who were 3rd and 4th year students at preschool teaching programs in four different universities in Turkey. Before analyzing the data, extreme value analysis was conducted via total scale score; after raw scores were converted into z scores, the data retrieved from 10 participants, which were greater than -3 z score, were eliminated and the analysis was conducted with data obtained from 400 participants. Correlation analysis was carried out between items and total test scores for each item; it was observed that each item had a value between $r = .57$ and $r = .76$. According to this, it is possible to utter that the items of the scale are related to one another.

Afterwards, item analysis was conducted based on the difference between lower and upper group means; all items in the scale were found as distinctive. In order to determine the structural validity of the scale, exploratory factor analysis were carried out; this results of the analysis suggest that the scale had 4 factors, which explained 66.13% of the total variance. Examining the items in the sub-factors, it is apparent that Factor 1 (Technological Pedagogical Content Knowledge) consists of 10 items, Factor 2 (Technological Pedagogical Knowledge) comprises of 8 items, Factor 3 (Technological Content Knowledge) consisted of 6 items, and Factor 4 (Technological Knowledge) consists of 5 items. The reliability coefficient of the overall scale was found as .94. The reliability coefficients of sub-factors were as follows: Cronbach Alpha internal reliability coefficient equaled to .96 for Factor 1 (Technological Pedagogical Content Knowledge); to .91 for Factor 2 (Technological Pedagogical Knowledge); to .92 for Factor 3 (Technological Content Knowledge); and to .88 for Factor 4 (Technological Knowledge). In conclusion, it is concluded that the scale developed is a reliable and valid assessment instrument to evaluate the technological pedagogical content knowledge of the preschool teacher candidates for science teaching.

Keywords: Technological Pedagogical Content Knowledge (TPACK), preschool teacher candidates, science education, technology integration



Academic discipline: Augmented reality
Paper ID : 255

Trends in Educational Augmented Reality Studies

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Augmented reality can be defined as technology which allows combination of real world images with virtual data simultaneously. Rapid advances in mobile technologies triggered using augmented reality in different fields such as entertainment, tourism, industry, advertising. Recently, it is known that there is a significant increasing in using augmented reality in educational environment and an increasing number of academic researches are being carried out. In these studies, it is pointed out that using of augmented reality in educational environments improved educational outcomes. Considering these research, augmented reality might be a beneficial educational tool for educational researchers. Existing research in literature leads to future research which about using augmented reality practices in education. The results obtained by existing research are important to see the situation in the field. For this reason, we aimed to investigate trends in augmented reality practices in educational research and give information about current situation and gaps for future research.

For this purpose, educational augmented reality studies published between years of 2011 and 2016 were examined in terms variables, years, countries, methods, sampling, data collection tools etc. In this context, by using key words such as "Augmented Reality" a search done in "Sciencedirect" and "EBSCO" databases and reached a total of 74 studies. The data were examined via content analysis and presented with graphs. According to the results that numbers of researches about educational augmented reality were increased in recent years. As a result of the research, the quantitative methods are prominent in educational augmented reality studies. Mixed and literature review methods followed quantitative methods. It was observed that most of the participants were undergraduate students and the sample size of researches was focused between 31 and 100. It was seen that the most utilized data collection tool was surveys. The results were obtained would be expected to contribute to the field to describe the existing situation and to contribute to the field.

Keywords: Augmented reality, education, trends

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Academic discipline: STEM applications in classroom
Paper ID : 258

The Impact of FeTeMM Activities on 7th Grade Students' Reflective Thinking Skills for Problem Solving Levels and their Achievements

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This study aims to identify the impact of FeTeMM (Science and Technology, Engineering and Mathematics) activities on 7th grade students' reflective thinking skills for problem solving, academic achievement at math course. The sampling includes 60 students in the 7th grade attending school during the second term of 2015-2016 academic year. A quasi-experimental research design with two groups pre-test/post- test quantitative methods was used. There were 32 female and 28 male students. 32 students were classified as experimental group and 28 students as control group. The data were collected using " Reflective Thinking Skills for Problem Solving Scale", and " Achievement Test". During quantitative analysis, t test was used to identify the frequency, mean, median, mode, standard deviation and independent groups. The results of the study indicate that the students' academic achievement and reflective thinking skills for problem solving have improved. According to t test analysis, there were significant differences between experimental and control group. Some recommendations were suggested according to the results.

Keywords: FeTeMM, Problem solving skills, Math achievement



Academic discipline: Mathematics education
Paper ID : 259

General Profiles of Prospective Mathematics Teachers at Preparing a Lesson Plan

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In the general competencies of teachers, which are one of the most significant variables of learning and teaching settings, it is emphasized that teachers employ a student-oriented approach and use and plan methods, techniques, activities, lesson tools and equipment, materials, and assessment-evaluation techniques in accordance with the objectives and acquisitions of domain specific teaching programs, together with the students. Within that context, it is of great importance that prospective teachers possess the required competencies. In this study, it is aimed to form an opinion on the competencies of prospective mathematics teachers at preparing daily lesson plans. For that purpose, 26 fourth year prospective mathematics teachers, who were taking Special Teaching Methods I course, were asked to prepare a daily lesson plan within the framework of an acquisition that is given in accordance with the content of the high school mathematics curriculum. Afterwards, the retrieved data were descriptively analyzed by the field experts.

The data obtained from the study suggest that majority of the prospective teachers are generally competent at preparing daily lesson plans. It was observed that the participants mostly predicted the appropriate time and method-technique to apply in their plannings regarding the formal part; majority of the participants advised the appropriate materials to use. Even a small portion of the participants remained incompetent at method-technique stage and thought inaccurately at the stages related to time. At the introduction part, the participants mostly made correct suggestions at drawing attention and motivation stages. It was observed that half of the participants made correct suggestions at starting the lesson and revision stages. In this part the stages, regarding which they did not make any suggestions, were mostly related to revision and motivation; the stage, regarding which they made inaccurate suggestions, was again related to revision. At the part of development, majority of the participants accurately thought of the transitions and associations related to the way the lesson is instructed, included intermediary summaries and correctly designed the application of the chosen method-technique. At the final part, more than half of the participants made accurate suggestions regarding closure and re-motivation stages; and the other half of it though of preparing a short summary stage. At this part, there are no stages, regarding which inaccurate suggestions were made, moreover; less than half of the participants did not make any suggestions; at the stage of short summary, less than half of the participants made insufficient suggestions. At the part of evaluation, in the application level the participants prepared the highest number of accurate questions regarding the cognitive field; approximately half of the questions were found accurate at the levels of knowledge, comprehension, and analysis. There were only a few accurate questions regarding the synthesis and evaluation levels. The inaccurate question levels were mostly found at the stages related to synthesis and evaluation, furthermore; the unprepared question levels were mostly observed at the same stages.

Keywords: Daily lesson plan, prospective mathematics teachers, competency

Teaching Values by Using the Scenario Approach in Elocution

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The speech that can be defined as a verbal expression of thoughts and feelings is the skill and ability which have been developed over time starting from the birth. Developing good relationships among people and making a good impression on the people are only possible by using the language well and speaking eloquently. Individuals who are able to use language well will be able to express themselves fully and accurately. Individuals that are in the womb detect surrounding sounds and after birth they first listen and then learn to speak. The speaking skill seen as the most important feature that distinguishes humans from other creatures is the basic building block of communication and interaction between people. "Individual is welcomed with his/her appearance but seen off with his/her speech" is a very old saying but still valid. To be able to express thoughts and feelings well have great importance in the way communities live together. Eloquent use of the spoken language and the expression of thoughts and feelings in accordance with the rules of the language can be a key for resolving disputes. Listening and reading represent the comprehension dimension of the language where as writing and speaking represent the narration dimension. The speaking skill, that the individual develops with the support of his/her parent and his/her surroundings after the birth, constantly continues and evolves with the training. Children have already learned to talk when they start school. But the language they speak is the language of family and their surroundings. For the purpose of teaching the child to use correct language structure systematic and planned training is essential. Therefore, it is intended to correct defects and mistakes of a child's speaking skill from the beginning of school age. In Turkish teaching program in the education system of our country elocution has taken place with the aim of ensuring that the rules of the language are used properly and eloquently. While with elocution individuals learn to speak both effectively and eloquently they also gain the skills for expressing themselves, transferring thoughts and feelings and talking within the framework of a context.

The system of values that forms the culture enables communication between people and at the same time protects from arbitrary behavior and practices. In addition, it guarantees historical consciousness of the people who live together and produce. Hence, it can be said that the schools are the place where common denominator of the educational value brought together and also the organization that fulfills the transfer process for the education. (Cihan, 2014: 432). The values of the society can be taught with elocution. These can be done in the classes by reading themoral stories, by getting students watching movies and by using narration techniques as well as by using technology and materials. It is the responsibility of the education that students are aware of the values, they adopt values and internalize them and they transfer these values to their lives. For this purpose, the students who are studying in department of Turkish teaching were asked (Bayram, 2015), within the context of elocution, to create scenarios by including Divan poetry of Edebnâme, Ebednâme and Aşknâme and the verses on the educational books on the values. Later they were asked to shoot a short film by integrating the scenarios teaching technologies that they have created into the course. Thus, it



is aimed to make the course interesting by enabling students to use their smart phones as a teaching material.

The study group of this study consists of 72 (44 girls, 28 boys) 3rd grade students who were studying in Turkish Teaching Department at a public university located in the Black Sea region. The research data were collected through semi-structured interview form developed by the researchers. The interview form consists of 7 open-ended questions. The answer to each question was analyzed using the content analysis. Analyzed data separated into code and themes and the values were given as frequency and percentage. To ensure the reliability of the analysis data analyzed by two researchers and Miles & Huberman's (1994) correspondence percentage was calculated. Correspondence percentage found as of 98,5 %. This was considered as the indicator of the reliability of the analysis.

As a result, it was determined that the students shot movies according to the Schwartz's values and the values that brought up by the Divan poets. Even though the aim of this study was the teaching of the mentioned values of the Divan poets' verses but it can also be seen that students mentioned Schwartz's values as well. It was determined that the students evaluated the relationship between elocution and the short films they shot in three dimensions. The students stated these dimensions under skills, education and socialization themes. The effects of the short films that students shot were grouped under two themes. These themes include mood and personal opinions. The students also stated that the short films they shot had some shortcomings in terms of preparation, application and moral dimensions. After watching the films of each other they expressed the feeling that they wanted to make some changes technically and content wise. Generally they stated that the elocution was beneficial in terms of the value teaching. With the help of this course they stressed that their role-playing, self-confidence and self-expression skills improved. From the teaching point they stated that they gained a different experience, they found this practice very entertaining and they expressed that the practice oriented event was very intriguing.

Keywords: Elocution, values teaching, scenario, use of technology

Academic discipline: Elementary science education, environmental education
Paper ID : 261

An Effective Environmental Education Curriculum: Comparison of Finn and Turkish Science Curriculum

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The main purpose of this study is to examine the objectives related to Environmental Education (EE) in Turkish and Finn science education curriculum in terms of Bloom's Taxonomy. Document analysis was used as data analysis method. The science curriculum of these two countries were obtained from the websites of ministry of education of the countries. The curricula were subjected to document analysis and the objectives related to EE were labelled as knowledge, understand, apply, analyse, synthesis and evaluate which are the Bloom's cognitive domain levels. Results showed that objectives related to EE covered the 13% of the whole science related curriculum in Finland while they covered the 10,9 % of the whole science education curriculum in Turkey. The EE related objectives were mostly in the second level of Bloom's Taxonomy which was understand level in the both countries' science education curriculum. There were no objectives in the synthesis level for Finn curriculum and in the evaluate level for the Turkish curriculum. The other objectives were distributed equally to other levels for both curricula. These results indicate that there is not much difference between the Turkish and Finn science education curriculum in terms of EE.

Keywords: Environmental education, Turkish science education curriculum, Finn science education curriculum, elementary education



Academic discipline: Preschool Education
Paper ID : 262

Review of Preschool Foreign Language Education in Line with Opinions of Teachers and Parents

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After prenatal period, preschool years are the period where development in human life is the fastest. With ending of babyhood, children start to recognize and explore surrounding world. This exploration does not only pertain to physical dimension of the world. Children also start to learn the rules, values, norms and language of the world they live in. Preschool period is substantially significant on language development as it is in other areas of development. Children, who have a healthy development, form a positive relationship and communication with their parents and surrounding people and have a good environment of growth, become happier and more successful in their future life. The brutal competition in today's world shows its effect in every area. This competition is quite obvious in human resources area as well. Hence, people, who speak several foreign languages, have a good command of technology and level of education, are sought for employment. As a result of this and many other points, parents attach more importance to education of their children and strive for their children to obtain skills and knowledge in various areas. Today, there are different educational activities in advertisements of numerous preschool such as foreign language, values education, ballet education and swimming course etc. The objective of this research is to review foreign language education in preschool in line with opinions of teachers and parents. Within the scope of the research, a parent form consisting of 12 questions in line with opinions of experts and teachers and a teacher form consisting of 10 questions were used. Working group of the study was formed by 70 parents whose children are being educated in 3 preschools in Tokat city center, which was determined as purposeful sampling method, and 20 preschool education teachers working in these schools. Opinions of participants were obtained by questionnaire. The data obtained through questionnaire form were analyzed by use of descriptive analysis method and SPSS data analysis program. According to research findings; when answers of parents and teachers to the question "do you find mother tongue development of children adequate?" were analyzed, it was observed that 85% (60 persons) of parents find mother tongue development of their children adequate, 14,3% (10 persons) find it inadequate while 75% (15 persons) of teachers find mother tongue development of the children, who are educated in their class, adequate and 25% (5 persons) find it inadequate. When answers of parents and teachers to the question "Do you find foreign language education necessary in preschool period?" were analyzed, it was observed that 72,9% (51 persons) of parents said yes, 27,1% (19 persons) said no and 85% (17 persons) of teachers replied as yes and 15 (3 persons) replied as no to the same question. When answers of parents and teachers regarding the foreign language to be taught were reviewed; it was observed that 92,9% (65 persons) of parents marked English, 7,1% (5 persons) marked German, 100% (20 persons) of teachers marked English. When answers of parents and teachers regarding the person to provide foreign language education, 82,9% of parents (58 persons) stated it should be foreign language teacher, 17,1% (12 persons) stated the current teacher and 100% (20 persons) of teachers stated the relevant foreign language teacher who provides foreign language education. When answers of parents and teachers were analyzed regarding the type of method to provide foreign language



education; 65,7% (46persons) of parents stated it should be by means of games, 20% (14 persons)stated music, 14,3% (10 persons) stated video and 60% (12 persons) of teachersstated games, 20% (4 persons) stated music and 20% (4 persons) stated video.

Keywords: Preschool period, foreign language education, teacher, parent



Academic discipline: Science education
Paper ID : 265

Determining Question Types that Pre-service Teachers Associate while Teaching in School Practice

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Learning is a process that students are to be engaged and take responsibility in stages of this process. Assessment is also one of the ways to initiate and execute learning in the classroom. Assessment was defined as to include all activities that teachers and students take on and use in the teaching and learning process. According to their definition, assessment includes teacher observation, classroom discussion, and analysis of student work, including homework and tests. An effective assessment can take a variety of forms and ways to fulfill. One of those is choosing the right type of questions that are asked to students. There are three types of questions as convergent, divergent and evaluative questions. It is important to ask right type of questions since it has a major impact on the quality and quantity of student achievement. Therefore, the aim of this study determine the type of questions prospect primary science teachers associate while teaching science. Semi-structured observation forms were used to collect data. Participants of the study were five pre-service teachers and totally seventeen lessons which lasted for 40 minutes were observed during school practice. Deductive content analysis was applied and frequency of convergent and divergent questions were determined for each participant. It was seen pre-service teachers associated convergent questions more often than divergent ones in teaching. There were no records of evaluative questions in the process. Since, divergent and evaluative questions help students to realize the substantial relations, create new ideas, and lead them to think scientifically and so on it was suggested pre-service teachers should be supported to associate this type of questions and evaluative ones often in the classroom in order to let students to have creative answers and to think on possibilities rather than right or wrong answers.

Keywords: Convergent questions, divergent questions; evaluative questions; pre-service teachers

Academic discipline: Education, media literacy
Paper ID : 266

Advertising Analysis through Hermeneutics Approach in the Context of Media Literacy

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Advertisements have a significant impact on cultural and social life. The advertised products affect the perceptions of individuals and also affect the society as well. In this context it is essential to investigate the language used and visuals to understand how their effects are realized. The researches carried on recently claimed that advertisements are marketing emotions more than the product itself. Products are accepted as objects that reflect the desires of men and women. In this regard advertisements lead to the formation and spreading of modern myths. When the function of myths in social life is observed, three different functions can be mentioned; these are functions that create meaning, value and identification. The sample advertisements are investigated in this respect. It is necessary for all individuals to acquire knowledge and skills on media literacy in the new media age. The reason is that there is little time that the individuals encounter with media and adds contents in their daily life. The aim of this study is to investigate the effects of myths used in the advertisements on individuals and to improve the analyzing skills in media literacy definitions. Besides the mentioned purpose above, it is aimed to improve the knowledge and skills of the students related to the subject in media literacy courses. All contents obtained from the media should be consumed by using media literacy knowledge and skills. How these knowledge and skills work about advertisements is the main target of this study. In this study, document analysis method which is one of the qualitative methods was used to analyze the written, visual and auditoria elements of the advertisements through hermeneutic approach.

Keywords: Media literacy, hermeneutics, advertising, modern myths



Academic discipline: Turkish teaching to foreign
Paper ID : 271

Using the Turkish Movies If Teaching Turkish as a Foreign Language: The Sample of Hababam Class

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In this study, the use of films in teaching foreign language, and the use of Turkish movies in teaching Turkish to foreigners will be focused on, and sample activities that may be used in Turkish Classes as a foreign language will be included in the sample of HababamClass (The Dunc Class).

In studies conducted so far, it has been reported that using movies in language teaching has many positive influences on learners. As an audio-visual art, a movie reflects the cultural and aesthetic images -shaped with the thoughts and emotions reflect national spirit- of a society in a realistic manner. A movie is a mirror reflecting real life, popular culture and art.

In foreign language teaching, audio-visual tools gain much importance in situations where only teacher and course books exist. In teaching Turkish as a foreign language, the teaching must be conducted with audio-visual tools proper for the modern age that will attract the attention of students.

In teaching Turkish to foreigners, the target is selecting the movies that will increase the interest in the class and by caring for the properties of the target audience will bring the natural use of the language to the classroom and develop language skills in a healthy manner (Yılmaz and Diril, 2015).

One of the most important aims of teaching Turkish as a foreign language is transferring the cultural elements of the Turkish society to students with all its aspects. Today, one of the most important tools in reflecting the cultural elements is -beyond doubt- movies. For this reason, the Turkish movies, which reflect the Turkish history and culture in terms of fiction and content, are among the important tools of teaching Turkish.

Qualified Turkish movies are the closest friend of students with their rich contents, cultural elements, and realistic structure as an assistant in teaching the foreign language. Turkish movies do not only contribute to the language teaching, they also reflect the real life of the Turkish society.

The “Hababam Class”(The Dunc Class), which is the sample in the study, is in the 1st row among the best Turkish movies with 9.5 points on IMDB (Internet Movie Database). The Turkish educational system is approached with a critical viewpoint and in a humorous manner. Three things are criticized in HababamClass: cheating, memorizing and so-called respect (Sönmez, 2011). This movie, which tells the Turkish Educational system in a humorous manner, is considered as one of the assisting materials that may be used in teaching Turkish as a foreign language.

The great contributions of movies in language teaching have been the subject matter of many studies in other countries; however, in our country, studies in this field are extremely few in number. As a matter of fact, if we want to increase the quality of teaching Turkish as a foreign language and student success, make students become enthusiastic by addressing their various

feelings, make them come closer to daily Turkish and introduce the values, history, culture, thought and feelings of the Turks, we must use Turkish movies in an efficient and sufficient manner in our classes (Arabacı, 2015, p. 95; ArslanandAdem, 2010, p. 67; İřcan, 2011, p. 944; Saraç, 2012, p. 33).(Narrated by:Şimşek, 2016:328).

In order to achieve basic purposes in teaching Turkish to foreigners, quality Turkish movies must definitely be made use of. In order to obtain the desired yield from Turkish classes by using movies, Turkish teachers must have the knowledge and skills on this issue. For this reason, this topic must be included in Turkish teaching department undergraduate degree programs and in programs intended to teach Turkish to foreigners (İřcan, 2011:946-947).

Keywords: Movies, Foreign Language, Turkish Teaching, HababamClass (The Dunces Class)



Academic discipline: Turkish teaching
Paper ID : 274

Listening Anxiety Scale for University Students: A Validity and Reliability Study

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The purpose of the mother tongue education is making the students acquire and develop four basic language skills (reading, listening, speaking, writing) in line with the level and needs of the students. Today's world requires individuals that are developed in terms of speaking skills and understanding skills. The justification of this is the fact that the individual is a subject who reads when required, who listens when required, who speaks when required, and who writes when required. For this reason, the individuals have to be people who can explain his/her feelings and thoughts in a clear manner, and understand and learn the stimuli they hear. Language has an important function in realizing the communication among people. The importance of understanding skills (listening-reading), which are among the basic skills, is great in achieving success in terms of personal success. Listening is making sense of the message sent by the source during the communication process in a clear manner and developing behaviors of these stimuli. Listening is one of the understanding skills and is accepted as the basis of the mother language acquisition. Listening skill is in an active position in formal/informal relations of human beings from the early stages of life and poses an indispensable dimension of daily life. In studies conducted on listening skill in the literature claiming that people spend nearly half of their daily lives by listening. There are some obstacles for a successful communication. Anxiety comes in the first line among these. It means the tension whose reason is not known and that appears with sorrow, thought that causes anxiety, worry, and the thought of something bad will happen. The term worry is used instead of anxiety in daily life, and has been translated into Turkish as "anksiyete" by sticking to the original term (anxiety) by psychiatry specialists. Anxiety has two dimensions, which are instant and constant anxiety. Instant anxiety may be shaped according to personal perceptions, vary from person to person, and is temporary; constant anxiety, on the other hand, is the disruption of personal health as a result of the increase in violence and constant stress source.

The purpose of this study is developing a listening anxiety scale to measure the anxiety levels of the teacher candidates. The study will become a valid and reliable scale to measure the listening anxiety levels of the students studying at universities. The study group consists of 400 teacher candidates studying at Gaziosmanpaşa University Faculty of Education Turkish, Science, Mathematics, Social Sciences, Computer Technologies and Class teacher departments. The data of the study were collected with the Listening Anxiety Scale, which was prepared with after a comprehensive literature scan. The literature scan, item formation, content validity (asking for specialist viewpoints), pre-testing, and validity and reliability measurement stages were followed in developing the measurement tool. The statistical analyses of the data were made with the SPSS Package Program. Validity and reliability studies will be made on these data collected, and the final form of the Listening Anxiety Scale



will be shaped. It has been concluded in the light of the analyses of the study data that the scale is applicable. It is foreseen that a listening anxiety scale whose validity and reliability are proven will be formed with this study. It is considered that by using this study, the findings on listening anxiety levels of the students from different departments will be achieved. The results that will be achieved with the help of this study may be used functionally in decreasing the anxiety in listening, which is a neglected skill.

Keywords: Listening, education, anxiety, listening anxiety



Academic discipline: Art education, visual art
Paper ID : 280

A Theoretical Analysis on the Value and the Necessity of the Visual Art Education in the Schools

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Educational systems are the most important social institutions to improve individual in many aspects through activities performed both in the class and out of school. The expected benefit from the educational systems is to provide an individual to be esthetics, creative and inquisitorial and to be a good citizen as well. In this context, all educational systems seek to improve individuals who think analitically in many ways, produce knowledge and creative. For the purpose, they invest huge amount of money to the education. School courses are the most important tool for the educational systems to reach their objective. School subjects should be consisted of not only the subjects such as mathematics, science, mother tongue, history but also the subjects such as visual arts, music, drama and dance that help the individual improve his/her sensual aspects.

Visual arts is one of the school subjets that plays an important role for the student to improve himself. The aim of this course is to improve the esthetical sides of the individual, to help him think esthetically and to become creative. This course is one hour a week between 1st-8th grades and also one hour a week between 9th and 12th grades under the name visual arts/music.

As the main purpose of the visual arts to acquire esthetical conciousness, the individual should involve activities and to see esthetical objects in his environment. At the end of this interaction, the esthetical eligibility of the individual arises. If this is the case, it can be claimed that the visual arts play a key role on the activities performed in the class, the efforts of the teachers and the content and the quality. On another aspect, the approach of the school towards art and esthetics as an authority plays a significant role to occur esthetical experience. It can be said that the school activities and programs without esthetical concerns do not provide enough help for the individual to aquire esthetical conciousness and awareness.

The study is a theoretical study. In this study, a theoretical analyses was carried to indicate the necessity and the value of the visual arts. In this context, the visual arts is introduced at first. Then, it is discussed whether the course is necessary based on the cause and effect.

Keywords: Education, visual arts, value, course

Academic discipline:
Paper ID : 284

Readiness Levels of the Pedagogical Formation Students on ICT and E- Learning

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The increase in the speed of access to information and sharing of information day in and day out, changes in information and communication technologies , the proliferation of Internet technologies has affected virtually all of human life. This change has affected the process of teaching and learning approach and made it mandatory to re-arrange the learning environment (physical structure of the classroom , curriculum , course content , etc.), improve teachers' skills and attitudes and comply with these changes.In this changing process, Internet-supported information technology classes, educational portals (skool.t the global gateway , I think.co . etc.) , Intel projects such as teacher training have been made to ensure the use of technology in education and enhance the quality of education by the Ministry of Education in different periods.Through the last project " Increasing Opportunities and Technology Improvement Act " (Fatih), it is aimed to ensure the provision and management of educational e-content, the effective use of ICT in the curriculum , informed, secure , manageable and scalable ICT.During the implementation of the project (FATİH) which was introduced as a pilot implementation in 2011 2010, 620,000 classrooms - firstly secondary schools - were planned to provide with laptop and internet access, classrooms were installed with smart boards, students and teachers were provided with laptops , Education Information Network, (EBA) was established which is a structure consisting of e-content programs , e-document and e- courses.Even though such kind of studies by National Education Ministry on the active use of information and communication technology have solved the problem of the physical infrastructure of the educational environment, changing teachers' habits of using information and communication technologies requires a process which needs in-service training. Readiness level of teachers, who will begin the profession newly, for the use of ICT is important in terms of achieving the objectives of the Ministry of Education on the use of technology.At this point, it is important to determine the new teacher candidates' levels of the use of information and communication technologies and their readiness for e-learning which is briefly described as e-learning through the internet, and plan the necessary in-service training programs on the basis of this level for preparatory education during the first appointment.It is expected that determining the teachers' level of e-learning, information technology usage and taking possible precautions rescue classrooms from being technological dump as well as providing teacher and students with targeted lifelong learning opportunities and improving the quality of education. In this respect, the study aimed to determine the candidates' level of information and communication technologies usage and their readiness level for e-learning who plan to become a teacher by training pedagogical programs.



Relational model of general survey model is used in this study. Relational model is a method used to determine the degree of interaction between multiple variables. The study group, graduated from the faculty of different departments , 2015-2016 fall semester , were composed of 241 students in Ordu University and Sakarya University Pedagogical Formation Training field. While selecting samples, Simple random sampling was conducted. Of the 241 pedagogical training students, 167 students are female and 74 of them are male.

Personal Information Form "; including Information technology, communication technology, mobile technology, which consists of three sub-dimensions and 28 items were developed by Wilkinson, Roberts and While (2010); translation into Turkish, adaptation , reliability and validity studies were done by Haznedar (2012); Using Information and Communication Technology Skills Scale " was developed by Demir (2015) , 33 items and computer self-efficacy were obtained by "Readiness Questionnaire on E- Learning" including the sub dimensions such as Internet self-efficacy , online communication self-efficacy , self-learning , learning control and finally motivation for e- learning.

According to the survey , almost entirely of teachers (97.1 %) use smart phones, more than half of them (68.5 %) have an internet connection at home ; Facebook (85.2%) , YouTube (85.9 %) , Google document - video (60.1%) , Instagram (77.5%) usage were found to be widespread while E-learning 2.0 tools such as Twitter, Blogs, Flickr, Second Life have been seen almost no use among teachers. In terms of the use of information technolog, it is found that teacher candidates has the highest proportion of mobile technology (88%) , followed by communication technologies (85%) and Information Technologies (74%). Generally, according to 5-point Likert scale, the arithmetic mean of the candidates based on the ratio of information technology use ($\bar{x} = 4.06$) was found to be quite good. Candidates' readiness level for e-learning was found to be above the arithmetic average according to 7-point Likert scale ($\bar{x} = 5.21$) , especially the Internet self-efficacy of teachers ($\bar{x} = 6.00$) , self-learning ($\bar{x} = 5.50$) was found to be high while motivation for e-learning was found to be the lowest perception ($\bar{x} = 4.42$). In the study, it has been determined that there is a meaningful relationship in a low level but in a positive direction between teachers' readiness for e-learning and the use of information technologies. As a result, it has been proposed that training for e -learning and information technology should be regulated by the institutions during the pedagogical training of teachers or at an early stage of teaching profession.

Keywords: E-learning , communication technologies, information technologies, readiness , pedagogical training

Academic discipline:
Paper ID : 286

**Analysis of the High School Students' Use of the Wattpad Application and their
Attitudes toward It**

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This study aims to determine why the secondary school students use wattpad applications, how often do they use it and what are their attitudes toward it.

The sample of this study was 100 students from the Erbaa Yılmaz Kayalar Science High School and Seyran Tepe Vocational and Technical High School students in the 2015-2016 educational year. Facebook attitude scale was developed by Akdemir (2013) was adapted and used to measure students' use of the Wattpad and attitudes toward it. To analyze students' use, attitudes and differences in their demographics such as gender, school types and grade level descriptive, independent sample t test and ANOVA tests were used. According to results, the students who participated in the study, use Wattpad application actively, and their attitudes towards it were positively high. Moreover, there is no statistical differences between genders in attitudes towards Wattpad applications. At the end of the study, in light of the data obtained, some recommendations were made to young people in using these applications.

Keywords: Wattpad, social media, attitude, e- literacy



Academic discipline: Classroom teaching
Paper ID : 287

**The Effect of Multimedia Materials on Students' Reading and Writing Ability Who
Have Problems about Reading and Writing**

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Aim of this study is determining the effect of multimedia materials on students' reading and writing ability who have problems about them. Quasi-experimental study design was used in this study. This study group was created with 30 students who continue their educational life in 2nd, 3rd and 4th grade in Vali Ali Cevdet Bey Primary School in Van and have problems about reading and writing. Study datum were collected via reading-writing ability rubric and evaluating the amount of read words and written words in a minute. Experimental practice lasted 6 weeks (5 hours in every week). In this process , an online multimedia material named "e-defter" and another multimedia material named "Nasrettin Hoca ile Okuma Yazma Öğreniyorum" were used. In control group, traditional educational practice, based on paper and pencil was applied. Non-parametric analyses were used on gathered datum. In consequence of datum analyses, It is confirmed that each group has the same level of reading and writing ability before the practice. After practice, it is observed that there isn't a meaningful differentiation between each group when reading and writing speed is compared. According to reading and writing rubric , it is seemed that while there is a meaningful differentiation for the benefit of experiment group in process of reading and writing ability and reading ability , but there isn't any meaningful differentiation between 2 groups.

Keywords: Multimedia, primer read and write, learning problem

**Examining Sense of Humor of the University Student by Means of Word Association
Test**

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Humor which has a place in every pace of live and is an inseparable part of social being is a notion. It has both characteristic of common to laughing and variety of individual perception. The way of telling and understanding of humor, whose history is equal to human history, differs from community to community, city to city, neighborhood to neighborhood, family to family, even individual to individual in the same family. This variety and individuality of the humor make difficult to definition of the humor because the individuality indicates that the number of the definition can be increased to the number of individuals who ever lived on earth. Almost every definition of humor bases on laughing. Plato, Aristotle, Cicero, Kant, Spencer, Bergson, Hobbes, Descartes, Darwin, Twain, Freud and many other philosopher and scholar approach to the notion with realistic, metaphysical, literary, psychological or logical perspective. In accordance with different definitions from past to present, humor is defined as an expression style which includes all emotions, thoughts and behaviors to laugh up your sleeve or laugh your head off. The concept of humor has been studied to define and characterize for years. There is an uncertainty and dissidence about how humor exists in history. It effects the appearance of humor theory. There are many theories about humor but “Superiority Theory”, “Relaxation Theory” and “Discrepancy Theory” are generally accepted. The first one considers humor as some people tendency to see themselves over the other people. The second one highlights the request of escape from negative mood. The last one points out discrepancy and contradiction between expectation and results of events which people live. In addition, humor makes easy to establish a social relations, helps to deal with stress and provides positive contribution to process of education and training. These features of humor that contribute human and human relations show diversity. It is an undeniable reality that people can laugh are more happy, people with advance humor perception are more sociable, confidence and have self-control. One way or another, the variety of humor perception effects diversity and character of humor. This study aims to examine the perception of university students because it is necessary to research effective users of social media and technology that are university students whose majority is young individuals in terms of oral and written interaction. This young generation faces humorous situation and humor tools which change their perceptions. Depending on the purpose of study, following aim has determined as what is the situation of university students perception about humor in contemporary social life. This perception is analyzed by Word Association Test (WAT) is an alternative evaluation technique. In the content of work, 160 university students contribute with their opinions about humor. Students were asked to write which words associate in your mind when was told the word of “humor”. Answers were recorded to frequency table according to the number of repetition. Answer words analyzed and depicted in detail. Generally, answer words are laugh, funny, humorousness, entertainment, etc. Additionally, there are different words to reveal different humor perceptions in work results.



Keywords: Humor, humor perception, word association test, alternative evaluation techniques

Science Activities According To the View of Preschool Education Teachers

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Children have a natural and innate sense of curiosity and discovery. From infancy they use all their senses to explore their environment. Using this experience they begin to perceive, know and make sense of the environment. Children actively continue their discovery process using their information in all new activities and restructuring the information when it is necessary. Preschool education is an education process in which 0-72 months children are prepared for basic education through developmentally and individually appropriate and simulating environment which supports for their physical, mental, affective and social development in accordance with the dominant cultural values. One of the major tasks of the preschool education is to guide, reinforce and improve children's innate curiosity and motivation to learn and think. Early science education is delivered in preschool education. It is the first planned and programmed science education for children and is given under the name science and natural activities. It is based on children's interests and needs. The aim of preschool science education is to provide children with an opportunity to learn about basic facts and events about the nature as well as to improve their affective and psychomotor skills and to help their attempts in making sense of themselves and their environment. It also tries to make children better estimations and observations. Therefore, preschool children should be offered and take part in those activities which improve their reasoning, observation, testing and interpreting skills. Preschool science activities are significant in terms of understanding the relationships between objects and events. At this stage children learn about scientific concepts through their active participation in the environment. Such activities reinforce and motivate children to pay attention, make observations and research. Teachers should make use of children's curiosity and prediction skills to improve their scientific understanding and thinking skills. For children participating in scientific activities helps in improving the cognitive, affective and psychomotor as well as scientific skills and facilitates learning. The aim of this study is to reveal the views of preschool education teachers about the preschool science education. The study was designed as a descriptive scanning research. The participants of the study were fifty preschool education teachers working at ten preschool institutions in Afyonkarahisar province. The data of the study were collected through a survey questionnaire with open-ended items. The questionnaire was reviewed by field specialists at Afyon Kocatepe University. Based on the feedback from these specialists the questionnaire was reorganized. Then, the questionnaire was administered to the participants. The questionnaire is made up of two sections. The first section includes four items about the demographical characteristics of the participants. The second one includes thirteen items about the the views of preschool education teachers about the preschool science education. The findings of the study showed that for the participants' science activities at preschool education level mostly contributed to cognitive gains. They reported that they used experiment equipment for the science activities at preschool education level. They also added that the most frequently used techniques in these activities were visits, observation and demonstrations.



Keywords: Preschool education teachers, science education, science activities, the views about the science activities

Ninth Grade Students' Metaphors Related To Cell Concept

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The fact that learning is a process which takes place in the mind and cannot be directly observed from the outside generates curiosity about how it functions. Researchers try to determine the processes taking place and the images forming in the minds of individuals as they learn different concepts which they encounter throughout their lives. Because it is not possible to directly observe the images forming in the mind of an individual different tools are used to determine them. When individuals are learning a new concept they incorporate it in their mental processes by associating it with previously learned concepts. In other words, they compare old and new concepts and determine their similarities and differences. Metaphors which are defined as mental tools a person uses in order to understand and explain extremely abstract, complex and conceptual facts are important instruments for understanding an individual's learning process. Through the metaphors developed for different concepts, human beings try to explain new concepts by comparing and contrasting them with those that are already in their minds. Among the subjects of life sciences, the high level of abstraction of the concept of "cell" leads to certain difficulties in its learning and to the concept being differently perceived. It is normal for there to be individual differences in learning. However, abstract phenomena can cause more different perceptions among individuals than tangible phenomena. It is believed that learning what kind of perceptions does an abstract concept such as cell lead to will play a guiding role in the teaching of the concept of cell.

This study which was conducted on ninth grade students aims to determine the metaphors that the students generate for the concept of "cell" which is one of the most basic concepts of biology. The study was conducted in the 2015-2016 educational year with 124 students from 4 different classes in the 9th grade of an Anatolian High School in the city of Samsun.

Phenomenological approach was selected from among the qualitative research methods. Phenomenology focuses on the phenomena on which we do not have thorough and extensive understanding. Phenomenological approach aims to investigate an individual's particular experience, attitude and perceptions when encountering a phenomenon. To this end, metaphors have been made use of in order to determine the perceptions of students towards the concept of "cell". To do this each student was asked to fill the blanks in the following sentence "A cell is like; because....." While the word "like" in the sentence aims to recall clearly the link between the object of the metaphor and the subject of the metaphor, the expressions to be written in the part of the sentence starting with "because" are to be the justification or the rational basis for the generated metaphor. There was no time limit determined for the students to fill in the blanks and papers were collected once the students filled them in.



Content analysis was conducted with the student data. For the content analysis all the metaphors generated by the students were put in order and then coded. After numerous examinations the coded metaphors were included in the categories formed in accordance with the similarities of the student's expressions.

At the end of the study there was determined a total of 86 metaphors. 4 metaphors which were determined to not have any relation between its subject and object, to be irrelevant and without justification were removed from the study after consulting with the field expert. It has been determined that some metaphors for the concept of cell are common among the students of the four classes with which the study was conducted. It has been found that the students generated metaphors such as "factory, family, country, school and human" the most. When the metaphors were examined with respect to the categories in which they were involved it was found that metaphors related to the functions of the cell were the most commonly developed ones along with metaphors about its structure and content. After the metaphors developed by the students were analyzed it was found that during the lecture on the subject of the cell the emphases placed on both the function and the structure and the content of the cell influenced the metaphors which the students have generated with respect to this concept. It has been determined that there were a lot of metaphors or justifications for metaphors regarding particularly the organelles and functions of the cell. The perceptions of the students with respect to the subject of the cell can be revealed fully by finding out metaphors for the concepts related to the concept of cell in a way which would support this study.

Keywords: Metaphors, cell concept, high school students

**Examination of Articles Published About Self-Regulated Learning in Selected Journals
of Instructional Technologies Field from 2011 To 2016**

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Researches in the fields of education, psychology and technology reveal different views on the changing learning needs, different learning styles, strategies and methods used. In today's world where become more important 21st century skills and lifelong learning, the revision of all sub-systems related to education such as education systems and training programs, learning theories, teaching methods and techniques and updating them for the changing needs are recommended. Different environments are used to create rich and meaningful learning outcomes such as face to face learning, online and mobile learning environments and researches are made on components of self-regulated learning that can be used in these environments. Also variables associated with self-regulated learning in these environments are often examined. Self-regulated learning one of the issues to be researched in terms of educational technology as seen study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resource. According to their own learning objectives put forward by individuals, self-regulated learning that emphasis on internal factors which have to achieve the learning objectives of the individual represents effective and a constructivist process that individuals attempt to set the behaviours, metacognitive competence and motivation level and that limit their goals by directing according to the environmental impacts. Researchers working on self-regulated learning reveal a variety of models to improve and measure self-regulated learning skills. Theory, model and researches on self-regulated learning are seen important by educators for dealing with learning difficulties, providing rich learning experiences and raising individuals with lifelong learning skills. The aim of this study is to examine the articles on self-regulated learning published between the years 2011-2016 leading international six journals in the field of instructional technologies within Social Sciences Citation Index (SSCI). Examined 56 articles contain the words "self-regulated learning" or "self-regulation" in the title, abstract or keywords of the Australasian Journal of Educational Technology (AJET), British Journal of Educational Technology (BJET), Computers & Education (C&E), Educational Technology Research & Development (ETR&D), Educational Technology & Society (ET&S) and Journal of Computer Assisted Learning (JCAL). In the study, Article Review Form, which was first developed by Göktaş et al. (2012) who used the studies of Sözbilir and Kutu (2008), Masood (2004), Reeves (1995); and then was revised by Kılıç Çakmak et al. (2013), will be used as data collection tool in the article with the name of "Educational Technology Publications Classification Form". In this way, identifying information of the articles will be collected such as research methods of the article, sampling method, sample level, number of sample, sample type, data collection tool, data collection method, data analysis method, details of the subject and the subject classification and publication title, journal, author, university of author, research aim, dependent-independent



variables. 56 articles related to self-regulated learning will be examined using content analysis method in terms of research method, sample method, sample level, number of sample, sample type, data collection tool, data collection method, data analysis method and examined variables. With content analysis method, articles are taken from many dimensions such as method, subject, sample, data collection tool, data analysis method etc. Making the association between dimensions that determine trends provide an opportunity to researchers in the field of instructional technology to assess the field with different perspectives. Also, content analysis method offers the opportunity to look through a holistic perspective to the field. Determination of the trends with a large number of journals contributes to obtain more qualified and comprehensive results to the future studies. In this context, the data obtained from articles with data collection tool will be collected in an Excel file and will be analysed. Then, the table containing the data to be generated by frequency and percentage calculations will be created to answer the research question and these tables will be interpreted by explaining.

Keywords: Self-regulated learning, instructional technologies, research trends, content analysis

**From Real to Virtual Sense: The Relationships between Gaming Motivation,
Magical Ideation, and Loneliness**

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Online games, especially massively multiplayer online role-playing games (MMORPGs), are ‘a class of network-based role-playing game where large numbers of players interact in real time within the context of a persistent theme-based 2D or 3D simulated virtual world’ (Peterson, 2016). Current virtual worlds - ‘often fantasy or science fiction themed’ (Guegan, Moliner, & Buisine, 2015) - enable players to access high-quality interfaces where both realism and immersion are portrayed (Peterson, 2010). Game designers adopt numerous strategies to intrigue players from different profiles and with different needs by both mirroring such arenas as the physical world in the form of ‘routine, daily economic or social activities’ and by injecting ‘magic portal’ to provide players with an alternative life limited in real world (Lin, & Sun, 2015). For instance, avatars need to handle several life-sustaining incidents; such as, eating food, repairing damaged materials, or using virtual currency, which resembles real life activities (Lin, & Sun, 2015). On the other hand, hiding or revealing identities, having one or more anonymity avatars, and connecting with others regardless of race, age, gender, class, profession, or location are one of the several activities that are limited in real world (Guegan, Moliner, & Buisine, 2015; Lin, & Sun, 2015; Peterson, 2009). Notwithstanding that, game worlds supplement the physical and psychological senses of immersion, due to various facilitators; like, development in high quality graphics, nonplayer characters, narratives, and identities with evolving histories (Li, & Sun, 2015). Such an immersion is one of the three gaming motivations (Yee, 2006), which enables players with a new rendered social environment to keep themselves away from routinized reality (Nardi, & Harris, 2006).

While game worlds provide both realism and immersion, which are amongst several of player motivations (Yee, 2006), Lafrenière, Verner-Filion, and Vallerand (2012) stated that there are two forms of motivation that shapes players’ gaming motivation: intrinsic and extrinsic. On the one hand, players enjoying to explore the game universe or feel thrill and sensation are representative of intrinsically motivated, on the other hand, those playing to gain in-game awards, virtual currency, admiration or recognition are categorized as extrinsically motivated (Lafrenière et al., 2012).

Other than gaming motivation, there are conflicting results on the notion of what type of personalities involve in game worlds; researchers depending on ‘convenience samples or subject pools’ led to a stereotypical expression that game players are young and male, isolated and lonely, and socially inept (Williams, Yee, & Caplan, 2008; Nardi, & Harris, 2006; Williams, 2003). However, Williams (2008) suggest that accuracy of such snap judgements should be answered by the researchers. As a result, this study not only covered such



demographical variables but also covered magical ideation and loneliness as psychological and social constructs to better identify personality variables on gaming motivation.

Looking from such a perspective; that is, when game worlds are conceptualized as a ‘third place’ (Lin, & Sun, 2015) adopting a ‘fantasy lord of the rings type narrative’ (Peterson, 2016) in which different types of players have different gaming motivations, the purpose of this study is to examine the relationships between gaming motivation, magical ideation, and loneliness. Gaming motivation scale adopted by Akın, Kaya, and Demirci (2015), magical ideation scale adopted by Atbaşođlu, Kalaycıođlu, and Nalçacı (2003), virtual environment loneliness scale developed by Korkmaz, Usta, and Kurt (2014), and short form of the UCLA loneliness scale adopted by Yildiz and Duy (2014) were used as a data gathering tool. The data is being collected online and it is still in process. After the data is collected, descriptive statistics, Pearson Product-Moment Correlation coefficient, and path analysis will be conducted. Being able to clarify and quantify the relationships between gaming motivation, magical ideation, and loneliness will provide a glimpse to explore whether different sections of the player demographic, psychological, and social characteristics contribute to different gaming motivations.

Keywords: Gaming motivation, loneliness, magical ideation, relationships

How Turkish Academicians Participate in and Use Academic Social Networking Services

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Academic social networking service (ASNS) refers to “an online service, tool, or platform that can help scholars to build their professional networks with other researchers and facilitate their various activities when conducting research” (Jeng, He, & Jiang, 2015). The use of ASNSs have many possibilities for academic community; such as, sharing, accessing and disseminating scientific research results, advancement of scientific research institutions, and involvement in a broader academic discourse (Duman, 2015; Stachowiak, 2014; Güler, & Mutlu, 2013). Stachowiak (2014) states that researchers not only have the possibility of constructing a greater academic reputation and increasing their academic citation, but also have the possibility of popularizing their academic achievement by having a profile on one of the ASNSs.

Although the way researchers convey their scientific studies and findings might differ in subjects, disciplines, even in institutions, scientific journals, proceedings or monographs are assigned the highest value as a way of communication channel by researchers (Procter et al., 2010). Yet, one way to establish linkages to external knowledge resources - amongst others - is creating an ASN profile on platforms like ResearchGate, Academia.edu, and ResearcherID (Wasko, & Faraj, 2005). Although ASNSs enable academic community with many possibilities as stated above, using an ASN profile is still underestimated by academic community (Stachowiak, 2015; 2014). On the other hand, there are several studies emphasizing an increase in the use of researcher specific social media tools in scientific environment (Duman, 2015; Procter et al. 2010).

Looking from such a perspective, the purpose of this study is to examine how Turkish academicians participate in and use ASNSs. To be able to get a glimpse regarding their experiences on ASNSs, they are asked several questions through a structured questionnaire which was designed by the researchers. After a number of questions are posed in the light of relevant literature, the final version of the questionnaire was completed by reviewing, checking and revising its appropriateness in accordance with research questions. The final version of the questionnaire consists of three sections and 23 questions. While the first section covered the demographical information of the participants, such as gender, age, and academic title, the second section covered which and for what purposes ASNSs are being used. And finally, the third section of the questionnaire covered how Turkish academicians share, research, and collaborate through ASNSs.



The participants of the study were scholars from various universities in Turkey. The data is being collected online and it is still in process. After the data is collected, researchers plan to apply content analysis over the data. The results of the study is expected to illustrate how and up to what extent Turkish academicians benefit from the facilities served by ASNSs.

Keywords: Academic social networking services, knowledge sharing, collaborative knowledge building, Turkish academicians

Academic discipline: Printmaking
Paper ID : 301

Kitchen Lithography as an Alternative to Traditional Litography

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Handprints which is known that made on the cave wall thousands of years before, footprints left by our feet in the seaside or fingerprints that we used instead of signatures in the past are just a few of the actions that a signing and reproduction of human being. It is seen that the reproduction action is developing, expanding and specializing in time. Especially the after the Industrial Revolution, printmaking area comes in an important point, associated with the increase of technology development and material diversity. Multiplication techniques like posters, stamps and photocopying has become part of our daily lives. Every technological innovation emerged is affects also printmaking significantly like in all fields. In particular, the acceleration of variety of materials is forced to emerge new techniques of printmaking. The newest printmaking techniques has variations from traditional printmaking techniques. It is required to reveal the variations. "Kitchen lithography" is one of these new (alternative) printmaking techniques. Comparison of the traditional lithography and kitchen lithography which could be an alternative to traditional lithography is done practically. These differences have been presented in the paper by putting them into writing. As a result of this study, it is seen that unlike the traditional lithography, kitchen lithography can be applied without harmful chemicals (acid, thinner types, etc.). Compared to traditional lithography in this technique results are received faster and students or artists doesn't have to work in a specifically arranged studio. Being cost-efficient and not holding complex process steps are among other acquired results about kitchen lithography. This technique is defined that not only by professionals but also be used by amateurs. It is inferred from the results that kitchen lithography has features that even children can apply therefore it is expected to it can be used widely.

Keywords: Art, printmaking, lithography, kitchen lithography



Academic discipline: Educational sciences
Paper ID : 303

**The Opinion Analysis of the Teachers Attending Teaching Practice within the Scope of
Pedagogical Education Program**

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Teaching practice is very important for the students to begin teaching. There are theoretically written regulations regarding the operation of this process and it can be assumed that all faculty members are generally complied with these regulations. However, when it is looked into the practice which has a great significance in the training of the preservice teachers, every teacher candidates can only be observed once or twice due to the excess workload, the emotional approach to the case, not giving enough importance to the practice of teachers and so on, in the same way, during the term, because of some other reasons such as the excess course load, lack of proper planning, attaining the faculty members who do not have teacher training qualifications to the course, not giving importance to the practice. Therefore, the faculty members usually cannot guide properly and enough efficiency cannot be observed in the preservice teachers.

Significance: This study is important since it provides new applications and recommendations both to the faculty members who will give teaching practice courses and to the practice teachers in the practice schools and also the students who will attend this practice in subsequent periods by defining what the students who attend teaching practice think about the teaching practice process and what should be done to make this process effective. **Purpose:** The purpose of this study is to define the perceptions of the students who attend the teaching practice under the pedagogical training program. Under this main goal, how and in which way the teaching practice affects the perception of teacher in students, whether the students find the teaching practice meaningful and useful and also what brings the teaching practice to the students themselves are studied. **Method:** The study is created and conducted as a qualitative research. Simple random sampling method among the methods of qualitative research is used. This method provides speed, ease of use and affordability. **Data collection tools:** In order to determine the perceptions of the students who go teaching practice under the pedagogical training program, six (6) open-ended questions were asked to 28 volunteer teacher candidates. A questionnaire form with these questions has been created and it is provided that participants write their opinions in line with these questions in form and send those to the researcher through email. The questions used to determine the opinions of students who attend the teaching practice are as follows: 1. What kinds of problems have you experienced in teaching practice? How did you solve them? 2. How do you explain the gainings of teaching practice? Please explain clearly? 3. How did the teaching practice meet your expectations from this implementation? 4. How do you evaluate the sufficiency of teaching practice time you attend? 5. In your opinion, how teaching practice should be and what should be included in it? 6.



Under teaching practice what the faculty member in charge and the guidance counselor in the practice school should do? Data Analysis; For data analysis, content analysis technique from qualitative data analysis techniques was used. In the stage of reporting data, direct quotations from the teacher opinions were used to increase reliability. Participants have encoded as following TPP1*, TPP2...TPT1, TPT2** Participants: The data are collected from 28 students who accepted to answer the prompts in the survey form voluntarily among the teacher candidates who attend the teaching practice under Gaziosmanpaşa University Pedagogical Formation Education Program in 2015-2016 academic year Spring Term. 9 interviews were excluded from data analysis due to various missing information. Results: The research process is ongoing and the data analysis is in the process.

Keywords: Teaching practice, pedagogical education program, preservice teachers



Academic discipline: Mathematics education
Paper ID : 304

The Application of Lesson Study Model to Inservice Training: Views and Experiences of Mathematics Teachers

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Lesson study refers to a teacher training model/approach in which teachers come up with solutions to the educational problems by working in collaboration in a systematic research process. This model has been successfully used in many Far-East countries for years, especially in Japan. Recently, it has been used in different countries and positive results have been taken in terms of teacher training. Studies have shown that when lesson study is well-adapted to the cultural and contextual differences of societies, it is effective in improving knowledge, abilities and beliefs of teachers. Lesson study includes planning, teaching and evaluation of specific number of research lessons by teachers in small groups in collaboration. In research lessons taught in real classes, teachers conduct the lesson plan prepared collectively by them and gather various evidences on the way students learn and effectiveness of the lesson. At the planning stage of a research lesson, in other words at the first stage, teachers make detailed pre-examinations to prepare a thorough lesson plan in compliance with the pre-determined goal/acquisition and report these examinations. The examinations may be in several dimensions such as reviewing of textbooks and various teaching materials in a critical approach, making researches and predictions on misconception and prior knowledge of the students, selection of teaching method and evaluation activities. At the next stage, as the lesson plan having been prepared based on these examinations is conducted in the class (in research lesson) by a teacher from a group, the other teachers make observations and collect data in learning environment. At the last stage, teachers gathering after research lesson think about the effectiveness of the lesson, exchange their ideas, argue on the possible changes to be applied in the case of teaching the same lesson and prepare a final report. To sum up, the studies on lesson study are completed through the stages like periodic application of all this systematic and circular research process in which teachers perform the main role, reporting the results and sharing it with stakeholders.

Lesson study, as an inservice education approach in teachers' training, has the potential to be applied in our country. The fact that in-service teacher training practises are mostly based on direct information transfer from experts to the teachers and trainings cannot go beyond short-time seminars makes this potential grow even bigger. In addition, that there have been no effective model for the in-service training of teachers and there are continuous positive reports on effectiveness of lesson study in international studies, requires researching the applicability of this model in our country. In this context, making a small-scale and local practise of lesson study with teachers and examining their experiences will light the way for future researches on in-service training and lesson study in our country. What is more, obtained findings may constitute a data source to be used in international comparisons.

In this study, lesson study applications were made with participation of 5 high school mathematics teachers. The aim of the research is to describe the experiences of teachers during the process of lesson study activities and reveal their views at the end of the process. Before the studies in which 6 lesson study cycles in total were conducted, teachers were asked for their personal information and addressed to a form of opinion including open-ended questions to explain their opinion on mathematics teaching and career improvement, after that, a general introductory meeting was held about lesson study. Observations were made and field notes were taken in the study environment in an attempt to describe the experiences at every stage of lesson study cycle. Teachers' journals, lesson plans and pre/final reports were also used as data source. Each of the teachers was interviewed to find out their opinions on the process at the end of the study. All obtained data were analysed in terms of their contents, and teachers' experiences at the stages of lesson study cycles and their opinions were revealed. At the end of the study, it has been found out that though they faced various and specific challenges at stages of the study, in general, teachers think that lesson study reached its aim. The teachers could easily state the points where students had understanding difficulties as they had the opportunity of observing them in class environment and taking notes while conducting their lesson plan, and afterwards teachers came up with solutions to these problems in collaboration. Though some regulations were made in teachers' lesson plans so that applications can be easily performed at the beginning of the study, some hardships were faced during the process. With this study, positive and negative aspects concerning applicability of lesson study in our country have been found out and suggestions have been presented for possible future applications.

Keywords: Lesson study, inservice training, mathematics teacher, professional development



Academic discipline: Virtual reality for education, primary education, reading and writing Education

Paper ID : 305

A Proposal and Initial Prototype of a Virtual Reality for Reading and Writing Education

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Computer technology continues to taking places in our lives. The use of technology in the education is increasing every day. There are many types of technological devices are being used in classes. Virtual Reality (VR, also named as Immersive Virtual Reality) is the recent technology that provides immersive experience and interaction. The technology uses a source (a computer or a mobile device) and a VR glasses. Until now, the use of virtual reality in education has been limited because of high price of the devices. Now there are new devices like "Oculus Rift, Samsung Gear-VR, HTC Vive and more..." make it possible to use virtual reality in education. Immersion, interaction, and user involvement with the environment and narrative, offers a very high potential in education by making learning more motivating and engaging.

This study aims to create more entertaining, interactive and permanent learning environments by including the virtual reality technology to education. For this purpose, a prototype has been designed to provide these positive achievements in first reading and writing education. During the designing process, the multi-media principles (multimedia principle, spatial contiguity principle, temporal contiguity principle, coherence principle, modality principle, redundancy principle and individual differences principle) developed by Mayer in 2003 and teaching principles were carefully considered.

During the implementation phase, this prototype is intended to be used simultaneously by all students in the classroom. When the teacher came to teach letter stage students will wear their VR glasses and the prototype comes into play at this stage. After the animation is finished, students take off their glasses and the teacher continues to lecture.

It is expected that the students will love the characters and the use of VR glasses. Consequently, the development of positive attitudes in students, and the realization of permanent learning are expected.

Keywords: Virtual reality, reading and writing education

Academic discipline: Graduate education, graduate program
Paper ID : 308

A Qualitative Study about Expectations of Graduate Students Regarding Their Study Programs

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The context of this study is an assessment of expectations of graduate students regarding their study programs, their advisors, after education intentions and of their problems and solution proposals. This study is conducted in case study from among qualitative research designs. Study group is determined with easily accessible sample. Without being bound to a program, all accessible graduate programs have been taken into consideration. In this context, the study reflects the thoughts of 44 participants from 22 different programs. Interview form consists of nine open ended questions.

Semi-structured interview form is prepared according to review of literature and expert opinions. Interview questions were presented to the experts after the questions were prepared. It has taken the last form with regard to feedbacks. Thus, the structural validity of measurement tool is provided. In accordance with the nature of qualitative research, the data were analyzed by descriptive analysis and content analysis in both. Analyses were conducted separately and simultaneously by two researchers. Harmony between the researchers and the reliability of the study were calculated according to validity percentage which is developed by Miles & Huberman(1996:64). Calculated harmony percentage was found to be %98. In case of the harmony percentage is above %90, it is considered to be a reliable analysis.

42,9 per cent of participants are male, 57,1 per cent of participants are female. 82,1 per cent of participants are at graduate degree, 17,9 per cent of participant are at doctorate degree. In terms of satisfaction about programs, research results show that 67,9 per cent of participants are satisfied and 17,9 per cent are totally satisfied. Purposes of participants about taking a graduate program in order of priority are making an academic career, self-improvement, personal satisfaction and obtaining financial income. After finishing the program, expectations of participants are starting a work, being one of the authorities in the field, being an academic staff, being promoted in their professional careers, and the desire to take title and to gain degree of specialization. In a question specifically, whether they receive graduate education which they want before in the programs they are; except for four participants it seems to they get graduate education in the area where they want. There are some participants who confronted a lot of problems at the beginning of their programs and some did not. They pointed out that lecturers have quite different traits when they were asked to say their expectations about lecturers. Some participants state that a group of lecturers is very good, understanding, very helpful, and a group of lecturers is egoist, discriminatory, over disciplined, and a group of lecturers is reckless and unqualified. Participants told that graduate education should not educate almost in every corner of Turkey when they were asked their opinion about this matter because of the condition of insufficient recourses in libraries. Although participants express their negative thoughts about graduate education in Turkey, they also think that it can be improvable if it becomes qualified. In addition, some participants



highlighted that there are qualified academics workers graduate programs in developing areas of Turkey but their numbers are few. If these programs have sufficient staff, naturally, education of graduate programs can be enough qualified in everywhere. Generally, participants suggest that it should be a more objective assessment in acceptance process of graduate programs.

Keywords: Graduate education, graduate program, doctorate program, expectation

Academic discipline:
Paper ID : 311

Students' Views Related To Achievement of Educational Aim of Instruction Via Creative Drama

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Creative drama is one of the instruction methods which is preferred in many courses nowadays. Teachers teach different subjects by using creative drama course and attempt to make courses attractive and interesting. Teachers promote knowledge, skills, feeling and thinking of students via creative drama activities (Başcı and Gündoğdu, 2011:457). In order to help them develop those competences, it is of vital importance to analyze the effectiveness of drama activities upon students. When literature is reviewed, although there are multiple studies conducted for analyzing participants' views related to creative drama, there is found no study about the same subject conducted at primary education level. For this purpose, the authors decided to prepare a three-hour workshop plan for introducing students with creative drama. In workshop plan, there are three stages as warm up, animation and evaluation. In warm-up stage, students play games in which they can make descriptions intended for helping them to comprehend creative drama. In animation stage; activities such as role playing, animation and creating story have been conducted. In evaluation stage, students are split into groups and do such activities as writing songs & poems, creating a newspaper report, preparing banner, poster and advertisement. Additionally, there has been made interviews with students before and after workshop. Interviews which have been done in the beginning of workshop aim to reveal students' expectations and preliminary knowledge about creative drama. Interviews which have been done in the end aim to reveal their knowledge about creative drama, their views about the process and satisfaction levels related to expectations about creative drama.

Study sample includes ninety three 7th grade students in four state schools in Samsun. Study group has been chosen by using purposeful sampling. Students participated in a three-hour creative drama workshop. In this workshop, students conducted activities which aim to teach the terms used in creative drama. Students were asked before workshop to express their ideas about the concept of creative drama and write them. Then, workshop was conducted. At the end of workshop, students were asked to describe the concept of creative drama. Concepts used in creative drama were discussed throughout workshop. In the end, students were again asked about their knowledge and opinions related to creative drama. The views of students related to pre- and post-implementation have been comparatively analyzed by using content analysis.

The method of study is case study which is appropriate for nature of qualitative study (Merriam, 2013:40). Semi-structured interview form has been used as data collection instrument in order to get students' views before and after implementation. Students' views have been analyzed by comparative content analysis in qualitative design. In data analysis, fit



index has been preferred which was developed by Miles and Huberman (1994:64). It is assumed that content validity has been ensured in this way. Fit index in the study has been calculated as 98%.

As the major findings of research, it is found out that students are not aware of what they know about creative drama concepts in the beginning of process. Students express that they perceive creative drama as a sort of game. However, it is apparent that creative drama includes more than a game. At the end of workshop, students admit that they realize creative drama is an instruction method rather than a game and entertainment and creative drama activities help to teach the course by edutaining. They state that class attendance will increase and they will participate in the course with pleasure on the condition that courses are taught with this method. Additionally, they explain that in the beginning of process they associate creative drama with concepts like game, theatre, entertainment; at the end of process they realize that creative drama consists of warm up, animation and evaluation stages and they learn about terms like improvisation, role playing, conscious corridor, dramatic moment, conflict. It is found that students develop awareness about this method thanks to creative drama workshop. Students note that they pay more attention to school and course thanks to this method, they request for this method to be used in all courses and similar workshop studies should be conducted more frequently.

Keywords: Creative drama, workshop, students' views

Examining of Epistemological Beliefs of Students in Science Education, Biology Education and Biology-Related Pedagogical Formation Course According To Some Variables

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This study was performed in order to examine the epistemological beliefs of students who study science education, biology education and take the biology-related pedagogical formation course in Ondokuz Mayıs University. The first steps in the study of epistemological beliefs were laid in 1968 by Perry. The subject of epistemological faith has been a subject of study often used by educational researchers that date until today. Various models successive about the structure of knowledge and learning was created as a result of the work done up to this time. In this study, the Schommer's multidimensional epistemological Belief System models from these models have been studied properly. Epistemological beliefs are used to answer "What is knowledge?", "How information is acquired?", "What is the degree of accuracy of the information?" "Information in what way it is structured in students?" like many questions in form. Epistemological beliefs in the best way is defined as individuals as to what information subjective beliefs about how the place of knowing and learning.

In order to determine epistemological beliefs of the students for this study that were conducted with a total of 107 students, including 32 from students of the fourth class science teacher, 41 from students of the fourth class biology teacher and 34 from the formation training biology students studying in Ondokuz Mayıs University.

In this study, "The Epistemological Beliefs Scale" was used with the aim of determine students' epistemological beliefs that was developed by Schommer (1990) and adopted in Turkish by Deryakulu and Büyüköztürk (2005). The scale is a thirty five-point scale consisting of three factors. The first studies on epistemological beliefs are based on the examination of these beliefs in general as one-size. Schommer approaches to tackling the multi-dimensional information allows to obtain more detailed information about the epistemological beliefs of individuals and emphasizes five dimensions for epistemological beliefs.

In this study used as The Epistemological Beliefs Scale was adopted in Turkish by Deryakulu and Büyüköztürk (2002) "The Belief of Learning Depends on Effort", "The Belief of Learning Depends on Ability" and "The Belief of There is Only One Unchanging Truth" consists of three factors. The research re-examined the psychometric properties of The Epistemological Beliefs Scale by Deryakulu ve Büyüköztürk(2005), "The Belief of Learning Depends on Effort", "The Belief of Learning Depends on Ability" 'and' "The Belief of There is Only One Unchanging Truth" internal consistency coefficient calculated for sub-factors respectively, .84, .69 and .64. The internal consistency coefficient calculated in this study for The Epistemological Beliefs Scale, respectively, for each factor .79, .80, .62. Research is a



descriptive study of college students' by gender and departments, epistemological beliefs in causal comparative models.

The data collected were analyzed with SPSS 21 program. The descriptive statistical methods were used to evaluate the data, t-test and one-way analysis of variance (One-Way ANOVA) was calculated. According to analysis the result of the demonstrated that there is no statistically significant difference between students' scientific epistemological beliefs and their gender of all three factors. According to the students' departments, it was found out those two beliefs, one of which is that "The Belief of Learning Depends on Effort" and the other one is that "The Belief of Learning Depends on Ability", differ. However; the belief concerning that "The Belief of There is Only One Unchanging Truth" does not differ.

Keywords: Epistemological beliefs, science education, biology education, epistemology

Academic discipline:
Paper ID : 316

**The Opinions of American and Turkish Prospective Teachers on the Student-School
Contact Principle for Good Practice in Education**

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Many views and model have been provided by specialists who have worked in the field of education, in order to get a qualified educational standard. One of them is the model "Seven Principles for a Good Education" which was provided to the literature by Gamson and Chickering. This model consists of seven distinct principles such as providing student-school contact, providing cooperation among students, using active learning, giving prompt feedback, providing making tasks on time, responding the high expectations and respecting diverse talents and ways of learning.

The topic of this research composes the first of aforementioned principles "Student - School Contact (SSC)" which each of them is quite comprehensive. The principle of SSC focuses on the importance of creating a powerful dialogue between students and school. A strong connection which is done between students and school is one of the most important factors to develop the feeling of belongingness and to provide motivation for student. Moreover, it is known that this case contributes positively to their intellectual developments, provides them to make their own values and it is an incentive factor to do future-relevant career planning. There has not been seen another research in the literature on Seven Principles for a Good Education which views of prospective teachers belonging to different nation and culture are reviewed as being compared. Thus, it is thought that comparing views of Turkish prospective teachers who are connected to the more developed education system with American prospective teachers is important for the literature.

The goal of this research is to compare views of American and Turkish prospective teachers on the student-school contact (SSC) as assessing them. What are views of American and Turkish prospective teachers related to the applications of SSC principle (1.principle)? Within this concept, the following sub-problems have been sought answer:

1. Is there any significant difference between views of American and Turkish prospective teachers about SSC principle?
2. Is there any significant difference between views of American and Turkish female and male prospective teachers on SSCA principle?
3. Is there any significant difference between views of American and Turkish female prospective teachers on SSC principle?
4. Is there any significant difference between views of American and Turkish male prospective teachers on SSC principle?



Descriptive survey model which is one of qualitative research model had been adapted in this research which is conducted by American and Turkish prospective teachers.

The research sampling composes of 182 prospective teachers (F=129, M=53) who took training in different grades and departments in Pennsylvania State University, College of Education in spring term of 2013-2014 training year and 246 prospective teachers (F=168, M=78) who took training in different grades and departments in Ataturk University, Education Faculty in spring term of 2014-2015 training year.

Seven Principles Scale (SPS) was developed by Bishoff (2010) in accordance with seven principles model for a well education which was revealed by Gamson and Chickering (1987). The scale consists of seven aspects which include seven principles. There are 10 questions for each principle in the format of five-point likert in the scale. Turkish adaptation of the scale was made by Aydogdu (2012) and its reliability coefficient was found as 0,68. American students were given the scale's English original version and Turkish students were given its Turkish version.

Data obtained from the scale was analyzed with the help of SPSS Package program. On the analysis of data from the scale; description statistics and independent t test were used.

According to statistical analysis results which were made within the concept of the research's first sub-problem's concept, there is not any significant difference on views of American and Turkish teaching candidates on SSC principle ($p=0,780$). Each of two principles has been seen to have positive views on SSC principle.

Within the concept of the research's second sub-problem, views of American and Turkish female teaching candidates and American and Turkish male teaching candidates on SSC principle. According to statistical analysis results with this purpose, a significant difference was found in favor of females ($p=0,000$). This result shows that female prospective teachers think in a more positive way on SSC principle. That females have generally more emotional character makes them think that they would affect on that female prospective teachers think positively on SSC principle applications rather than male prospective teachers and the case would cause that they are to be more concerned in their relations with students. These results which were obtained in terms of gender indicate similarity with studies of Sax, Bryant & Harper (2005), Bishoff (2010), Cosgriff (2012), Okumus et al (2013) and Yilar, Simsek & Topkaya (2015).

Within the concept of the research's third sub-problem, views of American female prospective teachers and Turkish female prospective teachers on SSC principle were compared. According to statistical analysis results, there was not found significant difference between two groups ($p=0,712$).

Within the concept of the research's fourth sub-problem, views of American male prospective teachers and Turkish male prospective teachers on SSC principle were compared. According to statistical analysis results, there was not found any significant difference between two groups ($p=0,828$).

Keywords:

Academic discipline: Education
Paper ID : 317

**Educational Alternatives to Traditional Education: An Investigation on Montessori And
Waldorf Schools In Vienna, Austria**

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The majority of students in traditional education attend schools defined by traditional notions of teaching and learning. While there have been significant efforts in recent years to better accommodate diverse learning needs, most students still attend school for a set number of hours each day, sit in teacher-led classrooms, and progress through grade levels based on age. For many students, this model works. They are successful in earning a school diploma, after which they may pursue postsecondary education and a career. But nowadays parents and researchers are highly interested in the types of learning methods which are right for a child. Choosing a school, or choosing an education method is an important decision- and today, with many educational choices available to families, a complicated one. Traditional structures of schooling sometimes make it very hard to create learning environments that result in full learning. So the experiential, project-, problem-based and collaborative learning that many alternative schools have been focusing on is becoming more popular. Alternative systems are the fastest growing educational systems in the world today. The term "alternative education" describes different approaches to teaching and learning other than mainstream-traditional education, usually in the form of public or private schools with a special, often innovative curriculum and a flexible programme of study which is based to a large extent on the individual student's interests and needs (Raywid, 1988; Koetzch, 1997; Aron, 2003; Carnie 2003). In elementary and early childhood education, three of the best-known approaches with European origins are Waldorf, Montessori and Reggio Emilia. All three are seen as strong educational alternatives to traditional education. In all alternative education methods, children are assessed by means other than traditional tests and grades. Instead, parents receive extensive descriptive information about their children's daily life and progress. Portfolios or other products of children's are so important. There are differences at the level of principle and strategy of these methods. Underlying these approaches are various views of the nature of young children's needs, interests and modes of the learning that lead to contrasts in the ways that teachers interact with children in the classroom, frame and structure learning experiences for children and follow the children through observation/documentation. There isn't enough studies about the effectiveness of alternative methods which provide insight into the children's gains with respect to reading and literacy, mathematics and motivation and analyze "what works and what doesn't" on an ongoing basis in Turkey. The process research on Montessori and Waldorf Schools in Vienna, Austria on March 2016. This research would assist educators while programs are ongoing to refine and improve their work. This article provides a brief comparative introduction and highlights several key areas of similarity and contrast of alternative and traditional educational systems. This study also aims to establish a baseline understanding of alternative education, seeking clarity about:

the types of alternative education and their offerings,

The world-wide and national-wide distribution of alternative education options,



the connection between alternative education and traditional education settings.

The article ends with the discussion of the methods that researchers apply to analyze the strenght and weaknesses of each approach specially for Turkey.

Keywords: Alternative education, Montessori Method, waldorf schools, Rudolf Steiner, Marie Montessori

Academic discipline:
Paper ID : 321

The Relationship between Self-Efficacy Levels for Learning Science and Intellectual Risk Taking Levels of Secondary School Students

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This study aims to determine the relationship between secondary school students' self-efficacy belief levels for learning science and intellectual risk taking levels and predictors for learning science. The study was conducted through scanning model and the data was obtained from the students studying at two middle-sized cities' centres in the Black Sea Region. Appropriate sampling method was used in this study and the data was collected from 569 secondary school students at different grades by using two different measuring tools. One of the measuring tools used in the study is intellectual risk taking levels and predictors scale which was composed of four factors and developed by Beghetto (2009) and adapted into Turkish by Yaman ve Köksal (2014). The other scale is a 3-factor measurement tool which was developed by Yaman (2016) to determine secondary school students' self-efficacy belief levels for learning science. The data in the study was analyzed comparatively with relational analysis according to the demographic characteristics of the students. As a result of the analysis, it is found out that there is a positive relationship between the scores of self-efficacy belief scale for learning science and the scores of intellectual risk taking and predictors scale. On the other hand, according to the analysis of the sub-dimensions of the measurement tools, there is usually a positive relationship among sub-dimensions, whereas, there is no relationship among certain sub-dimensions of two scales. According to the variables, it was examined by the variance analysis (ANOVA) whether there is a significant difference in terms of students' grade levels and it was determined that there isn't an inclination in a certain direction according to the grade level. Generally, it is concluded that students' risk-taking level for learning science is higher than their self efficacy belief level. As a result, the increase of the self-efficacy level in students will make a contribution to risk-taking level for learning science. According to these data, it will be beneficial to use updated science programs approaching and associating with cognitive and affective skills together.

Keywords: Self-efficacy belief, Intellectual risk-taking, Science



Academic discipline: Distance education
Paper ID : 322

Views of High School Students about Distance Education

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In recent years with the developments in information technologies, use of distance education at higher education institutions has expanded. Distance education is a type of formal education based on internet in which teachers and learners do not exist in the same place and therefore, there is no limitations about time and place. Major advantages of distance education include the use of information technologies to provide people who could not access regular formal education with an opportunity to have education, the improvement of the quality of in-service training and the provision of cost-effective education. Learners can choose a specific higher education institution due to several reasons. Research states that such a preference is based on several factors, including status of the institution, geographical status of the university, recommendations by individuals (family members, teachers, peers, etc.), interest of learners, future job opportunities, success of university, social opportunities of the city and availability of evening education courses.

Research indicates that undergraduate students do not have clear-cut views about distance education, but they mostly have moderate views. However, some studies reported positive student views about distance education. In addition, for them the positive dimensions of distance education include time and place independent education, easy access to course materials, and individualized education. On the other hand, the major factor in successful distance education is learners. More specifically, the demographical qualities, interests and attitudes of students play a major role in distance education. There are frequent studies about the views of graduate and undergraduate students about distance education. There are also studies about the attitudes of high school students towards distance education and about the effects of web-based education on student achievement and attitudes. However, the views of the high school graduates preparing for university entrance examination about distance education have not been frequently analysed. In Turkey following the 2016 LYS examination, nearly 2000 students entered into distance higher education institutions and nearly 10000 students entered into two-year distance higher education institutions. Given that distance education has expanded in recent years, the reasons for choosing distance education is crucial. Therefore, this study aims at uncovering the views of high school students preparing for university entrance examination about distance education and their motivations for choosing distance education institutions. The data of the study were collected through a survey consisting of 36 likert scale questions. It was administered to 223 high school students.

The findings of the study showed that 63% of the participants don't want to choose a program in distance education. On the other hand, 18% of them stated that they might choose it. Nearly half of the participants reported that instead of choosing a distance education program in a high-quality institution, they might prefer the same program in an ordinary university. The main reason for these findings may be that 51% of the students stated that they planned to enroll a department concerning medicine, engineering and teaching and however, such departments are not included in distance education. Another finding shows that only 22% of

the participants planned to enroll for a two-year higher education. However, in Turkey distance education programs are vastly common in this institutions. Nearly half of the participants reported that major advantages of distance education (efficient time management, easy communication, low cost, courses by specialists, etc.) were not beneficial for them. This finding suggests that the participants did not have enough information about recent developments in distance education which have made it more attractive. Nearly 60% of the students reported that their choice over distance education would not be supported by guidance teachers, family members and friends. Therefore, these key-groups should be taken into consideration by distance education institutions in their promotional and advertising activities.

Keywords: Distance education, choosing course, choosing university, university entrance examination



Academic discipline:
Paper ID : 323

**Examination of Pedagogical Formation Program Students' Self-Efficacy Perceptions
based on Certain Variables**

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Teachers are considered as one of the most significant items of the process of education. In the modern education, teacher, student, administrator, inspector, school, environment, and family are integrated elements, which are closely in interaction with each other; teachers are the key players in enabling this education system, which consists of these elements, to effectively function towards the desired objectives (Kahyaoglu and Yangin, 2007). It is believed that the success of education system is directly proportional to the skills possessed by a teacher. In addition to teaching, a teacher has responsibilities and duties such as assessment, evaluation, classroom organization and management. A teacher needs to be competent in these fields in order to fulfill all of these responsibilities and duties. According to the Ministry of National Education, competency conception is the ability to conduct a duty or responsibility. Self-efficacy is defined as personal judgments of one's capabilities to organize and execute courses of action to attain designated goals (Bandura, 1997). If a person believes he or she is fully capable of completing a task and achieving the desired result, she will set appropriate goals, be fully motivated, perceive her ability level to be adequate to the task, and will be interested in the outcome (Saraç, 2012). In our country, the need for teachers is satisfied through the faculties of education. In addition, not only those graduated from the faculty of education can become teachers, but also those graduated from other faculties can do so. Thanks to the decree adopted by the Council of Higher Education in 2010, those who obtained pedagogical formation certificate through a training program has been able to become a teacher ever since the academic year of 2010-2011. Regardless of faculty or department, students from all faculties and departments can obtain formation training while they are still students or after they graduate from their departments as long as they meet certain requirements in order to become a teacher. In this research, it is aimed to determine Pedagogical Formation Program students' levels of self-efficacy perception towards the profession of teaching and to find out whether these perceptions change according to certain variables, or not. For this purpose, the answers to the following questions have been sought: a) What are the self-efficacy perception levels of the Pedagogical Formation Program students? b) Do the self-efficacy perception levels of the Pedagogical Formation Program students display a significant change based on gender? c) Do the self-efficacy perception levels of the Pedagogical Formation Program students display a significant change based on age? d) Do the self-efficacy perception levels of the Pedagogical Formation Program students display a significant change based on department, at which they study or from which they graduate? e) Do the self-efficacy perception levels of the Pedagogical Formation Program students display a significant change based on what type of high school from which they have graduated?

In order to answer these questions, Teacher Self-Efficacy Scale which was developed by Tschannen-Moran and Hoy (2001) and translated into Turkish by Çapa, Çakiroğlu, and Sarıkaya (2005) was applied to Pedagogical Formation Program students. The reliability

coefficient of the scale was found as 0.95 by the researchers after examining the validity and reliability of the scale, which was translated into Turkish. This scale is a nine-likert type scale, which consists of 24 items. The population of the study comprises of 500 prospective teachers, who received pedagogical formation program at the Faculty of Education of Ondokuz Mayıs University in the spring semester of the academic year of 2015-2016. The study group consists of 150 prospective teachers studying at the pedagogical formation program, who are graduates and undergraduate students. Maximum variety and volunteering principles were taken as the ground while creating the study group. This research tried to find out whether the self-efficacy perception levels of the Pedagogical Formation Program students display a significant change based on gender, age, department or high schools, from which they have graduated. The data were analyzed via SPSS 17.0 package software; tests such as independent groups t-test and unilateral ANOVA were employed. The findings obtained through the analysis were evaluated; and recommendations were provided in accordance with the findings. Self-efficacy perception of a teacher is one of the significant factors affecting the productivity of both teacher and school. This study is of importance that it states the beliefs of Pedagogical Formation Program students, who are also prospective teachers, on their own professional competency.

Keywords: Pedagogical formation, self-efficacy, perception



Academic discipline:
Paper ID : 324

Determination of “Media” Perceptions of Elementary School Students through Drawings

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Media is one of the important factors that form current societies. We should ensure our children who will establish the society of tomorrow to perceive the media and media literacy very well. At this point, it is important how they perceive the media which should attain an important place in the children’s life. In this research using a pattern of phenomenology, one of the qualitative research approaches; it was aimed to determine how the media perceptions of the 5th grade elementary school students were reflected to the drawings. This study was performed during school year 2016-2017. Study group is consisted of 5th grade students (10 students) having education in an elementary school selected by taking transportation and working opportunities into consideration in central Tokat. Study data were collected by using drawing and interview techniques together. In the study, data acquired by a drawing technique were analyzed using a content analysis method; whereas data acquired as a result of the interviews were analyzed using a descriptive analysis method.

Keywords: Media, drawing, picture.

Academic discipline:
Paper ID : 327

Examining the Students' Views About Creative Drama Activities Related to Scientific Research

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The aim of this study is to reveal students' perceptions of scientific research by using creative drama activities. The study has been carried out within the scope of a project named as "We are Introduced to Creative Drama", supported by Turkish Ministry of Education. The study sample in the project consists of 67 students in total (37 female and 30 male) from three schools chosen among all schools in three central districts of Samsun Provincial National Education Directorate. Two students replied the questions with missing information; therefore their data were excluded from research and data analysis included 65 students. These three schools have been selected by using convenient sampling method. These students have participated in drama workshops in groups of 20-26 people on average. Students have been supposed to conduct 12 activities which are intended for the learning objectives about science, scientific knowledge, nature of science, scientific process skills and scientific research. These activities are conducted as three-hour workshops throughout 3 weeks.

VOSI-E scale (Views of Scientific Inquiry Elementary) -developed by Schwartz, Lederman and Lederman (2008)- attempts to identify participants' perception of science, scientific knowledge, nature of science, scientific process skills and scientific research which are assumed to be achieved thanks to activities conducted in workshop. This scale consists of seven open-ended questions. The scale –which was especially prepared for middle school students – includes questions to reveal the students' views related to the work of scientists, whether they are scientific or not, explaining the scientific facts, methods of accessing and using knowledge.

The data have been analyzed according to aspects of a scientific research designated by Schwartz and his colleagues (2008). Five aspects are taken into consideration during the analysis: First aspect, using more than one method in a scientific research; second aspect, scientific knowledge based on data; third aspect, the difference between experiment and observation; fourth, subjectivity and imagination in scientific studies and finally the difference between data and evidence. The data have been analyzed by three instructors. The data have been rated by the researchers separately and scores are categorized into "novice" (1), "transition" (2) and "expert" (3). When consensus occurs among the raters, the scores are entered into data analysis table and coded. When there shows up opinion differences among the raters, the reasons behind it have been discussed in detail and these discussions continued until reaching a compromise. After making commonly shared decisions, the scores are entered into data analysis table and coded. The maximum point that students could take for each question is 3 and the minimum is 1. The score that has been obtained by averaging the overall



test scores of students is accepted as their score of “view”. As the evaluation criteria, the scores between 1- 1.66 are accepted as “novice”, 1.67 -2.33 accepted as “transition” and 2.34 -3 accepted as “expert”.

When literature is reviewed (Schwartz and Lederman, 2006; Schwartz et al., 2008), it comes out that the “transition” and “expert” groups have few students; therefore, they are merged in many studies. In this study, a contradicting situation occurred after creative drama workshops. According to analysis results, %13,8 percent (9 students) are placed into “novice” group, %24,6 percent (16 students) into “expert” group, %61,5 percent (40 students) into “transition” group. The mean score of two questions related to using more than one method in a scientific research is calculated as 2.25, the mean score of question related to scientific knowledge based on data is calculated as 2.31, the mean score of question related to the difference between experiment and observation is 2.36, the mean score of two questions related to subjectivity and imagination in scientific studies is 1.95; the mean score of question which reveals the difference between data and evidence is 1.59. Considering these points into account, it might be confidently concluded that students have perceptions at “transition” level related to using more than one method in a scientific research & scientific knowledge based on data; secondly their perceptions are at “expert” level related to the difference between experiment and observation; and lastly their perceptions are at “novice” level related to subjectivity and imagination in scientific studies & the relationship difference between data and evidence.

Keywords: VOSI-E, scientific research, students’ views, creative drama

An Examination of the Impact of a Cooperative Puzzle Game on Efl Learners' Speaking Fluency

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This study explores the issues surrounding student interest and motivation for speaking English and the role of a certain commercial video game in improving the speaking fluency of the preparatory students studying at the Department of English Language and Literature at Karadeniz Technical University. In 2001, Prensky invented the terms digital natives, referring to students born and raised in an environment full of technology, and digital immigrants referring to those who learned how to use technology later on in their lives. The author describes the modern students by reporting that they are "native speakers of the digital language" (Prensky, 2001, p.1). Regarding the digital natives' attitudes towards learning, Prensky (2001, pp. 1) claims that modern students have "changed radically" and that the existing educational systems are no longer suitable for them. Assuming that English preparatory students are no different as they do want to become proficient in English and becoming fluent in speaking English is an important part of it (Brown, 2001, p. 8), seeking for the optimum ways to arm learners with a proper degree of proficiency is essential. Many suggestions have been made to help learners improve their fluency and this study examines the impact of Keep Talking and Nobody Explodes, a cooperative puzzle on English as foreign language learners' fluency development.

Accuracy and fluency should usually be the focus in speaking classes though some language teachers have prioritized accuracy as the most important oral ability. Students are usually asked to focus on the elements of correct phonology, grammar, pronunciation, and discourse (Brown, 2001, p. 8). In line with this supremacy, accuracy has long been considered more important than fluency. According to Gosuch (2011), underestimating speaking fluency skills in EFL classes has hindered the students' achievement in English. Learners of English as a foreign language usually attach a high priority to speaking so every learner wishes to be able to communicate orally using the language in real situations. Therefore, this study aims to find a more "friendly" way of improving their EFL speaking fluency to keep up with the demands of digital natives. With introduction of more technology-based classrooms, it is important to determine whether the outcomes of using video games as an instructional tool are beneficial to students or not.

The purpose of this study is to determine the effectiveness of a cooperative puzzle game on the speaking fluency of ELF learners. To this end, the differences in the number of words the students used per minute are compared following the six gameplay sessions. Lastly, qualitative data obtained through interviews helped researchers determine the fascination with the game. The following research questions were posed for this investigation:

- 1) Does the playing Keep Talking and Nobody Explodes help learners promote their fluency?



2) What are the perceptions of learners towards the use of Keep Talking and Nobody Explodes in terms of speaking fluency?

Four English major students studying at the Department of English Language and Literature, KTU were invited to attend gameplay sessions which were held out of the class hours. A debriefing session was held to help learners get familiar with the rules and instructions of the game. Then learners' progress throughout six game sessions was monitored. This process consisted of checking the number of words the volunteers used per round during the gameplay sessions and their perceptions towards the integration of the game in an effort to promote learner fluency. A comparison of the pre-test and post-test scores allowed for determining the amount of improvement made by each student. Once the comparison of words per minute in each session was determined, the students were interviewed about the effectiveness of the games. The results after a 6-session case showed that the learners demonstrated considerable improvements on their word count per round. Moreover, findings from the interviews suggest that KTANE may be an effective instructional tool for speaking fluency as it helped learners cooperate, have fun, succumb the temptation to win, thereby producing more words per minute.

Keywords: Video games, English as a foreign language, speaking fluency, digital natives

Academic discipline:
Paper ID : 329

Computer Games: a Boon or a Bane for Language Development?

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It would be no exaggeration to claim that many people are computer junkies from the womb. This is mostly because computer games have come into our lives and they have become an almost indispensable part of our professional and personal lives. Language learning field is not an exception, and is at the heart of this computer-led orthodoxy.

Computer gaming has been noted to be an alternative paradigm shift in language education even though some practitioners or users approach the issue with some justifiable expressions of scepticism. Users of computer games have been assisted and motivated by the authenticity, vocabulary development opportunities and pronunciation aids as well as other benefits. Gains from early technological tools encourage users to take that technological advances are in themselves beneficial for granted (Stockwell 2007). However, some still exercise caution for the assimilation of new technologies because computer-assisted language learning is challenged by lack of a critical adoption. But, what about users? As many are so much involved in those games, capturing the gravity of the issue from stakeholders' perspective is of crucial focus. Therefore, the study attempts to explore the perceptions of students studying at the department of English Language and Literature, Karadeniz Technical University (KTU DELL) towards the use of computer games in language learning. The following research questions were addressed in this study.

What are the perceptions of students towards the use of computer games in language learning?

Do male and female students differ in their perceptions towards the use of computer games in language learning?

Do students from different classes differ in their perceptions on the use of computer games in language learning?

Data for the study were obtained through an attitudinal questionnaire developed by Al-Nafisah (2011). The questionnaire comprises of 50 items as well as 4 background questions. The reliability analyses were conducted for the overall items in the questionnaire as well as subcategories of items. The instrument was found to be reliable both considering the overall reliability measures ($\alpha=.935$) and items in the subcategories ($\alpha>.60$). 326 students from the preparatory, first grade, sophomore, junior, and senior classes participated in the study and the findings were analysed via the SPSS 16. Basically, the participating students' beliefs regarding the affect, benefits, pitfalls as well as the facilitating role of communicative, cooperative and explorative skills were investigated.

The findings demonstrate that males and females exhibit different tendencies towards computer games regarding the affect, benefits, communicative, cooperative and explorative aspects of games. Video games have usually been associated with supremacy of male patriarchy though this tendency has recently been shattering. Except for remarkable similarities between the genders with reference to the pitfalls of videogames, video games



seem to attract a more male-oriented interest. The reasons are speculated in the light of the findings.

Keywords: CALL, computer games, learner perceptions

Academic discipline:
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Web Based Online Professional Development Opportunities for Teachers

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Undoubtedly, the teachers are one of the most important part of the education system. The quality of the teachers and the competencies they possess, are among the important factors that play a role in the quality and effectiveness of the education system. One of the factors that affect the efficacy and the quality of the teachers is professional development. If teachers want to be effective they should follow the latest developments about their branch and learning – teaching approaches. Teachers who are short of continuing professional development and refreshing their knowledge will have a skill deficit in teaching (Ornstein and Lasley, 2000) and consequently it is obvious that the qualified teaching-learning process will not likely to take place. Therefore, teachers at every stage of their profession from the moment they started to their career until they retire they need to develop themselves, Ministry of National Development and schools should provide suitable environment and opportunities for such a development.

Keywords: Teacher, web based, online, professional development



Academic discipline:
Paper ID : 336

The Role of Women in Education

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The participation of women in development of the member in society is avoidable. If we take in account that the women take most responsibility in family for preparing the infrastructure of developing and creating the confidant of the children to cope with troubles which may be faced in the future. It is well established that real and active participation in developing has many positives for women –and a flow on- for households, children and communities, and even in the most remote communities there has at least been discussion of women’s right to participate, and educated women are having a voice. Let’s not be naïve about this issue because there is still a long way to go in contrast of majority experienced men. Even many women are talking about becoming more financially independent or at least they can develop their skills, their economic potential, and their participation to develop opportunities to encourage their children to be more educated and increase the gender equality to improve resources and conditions and these can enable girls to go to school, all of which will have a profound impact on the future generations of women.

When the participation of the women becomes true the equality of community will be more effective to make progressive in education, science and development in making progressive in country.

Finally, in this study of the role of women in education, as right to get education to be able to participate in creating their children or citizens future and to carry out their tasks, has been investigated. Farther more this has shown that the potential of more than 60% of women has been losing so the education of women will be unavoidable for our development for the future of community. Here many observations and suggestions are discussed.

Keywords: Community, education of women, potential, participation of women

Academic discipline:
Paper ID : 337

The Effects of Education to Environment by Using Natural Energy Resources

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Nowadays the environmental issues have gained importance especially after the increasing in 'acid rain' caused by sulphur dioxide emissions from factories in Europe.

As the man began using the world's resources, his civilization and culture became increasingly dependent on what seemed an endless supply of energy from several sources. Since the industrial Revolution, the primary source has been fossil fuel; oil, coal, and gas.

But in the past few years, serious question have been raised about how long that supply will last. And the safety of nuclear power, not so long ago considered the energy source of the future, is under question too.

The research for less limited and more secure means of power has been given new importance. A large number of suggestions have come from scientist, engineers, and visionaries. Many of them are far out; some are almost certainly impractical. But almost all are being given a hearing.

Many current experiment are being conducted on new ways of making use of man's oldest power source, solar energy. Sunlight, captured by plants, provided the earliest beast of burden with fodder and later industrial civilization with the fossil fuels now threatened with depletion. But the sun also heats the oceans, and causes the atmosphere to circulate, producing winds, and therefore waves. Models foe systems using wind, waves, and ocean heat are now being conceived; some are already being tested.

The 'Greenhouse Effect' is just one of many fundamental change which are taking place in the environment .Tropical rain forest which took fifty million years to grow are being reduced at the rate of fourteen acres per minute; the word's deserts are growing year by year . Scandinavia's beautiful lakes are becoming lifeless due to 'acid rain' caused by sulphur dioxide emissions from factories in West Germany and Britain.

As conclusion the industrial growing are causing huge damage in environment, so the education of the people would reduce its effects and encourage the people to save the future of generation.

Keywords: Civilization, environment, greenhouse, industrial revolution



Academic discipline: English language teaching, educational technology in ELT
Paper ID : 338

Digital Computer Games and Vocabulary Development in ELT

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In this digitalized world, it is an inevitable need for language teachers and learners to melt education and entertainmet in the same pot like edutainment. As one of the ways of edutainment, digital game-based learning serves well for today's EFL learners. In this respect, this study aims to investigate whether digital games really help learners to acquire new vocabulary in English language and their perceptions about digital game-based learning. To this end, a mixed-method experimental study was conducted with a total of 13 seventh grade students at an elementary school in a city located in the northeastern part of Turkey. The participant students played a life simulation digital game for about 20 minutes per day during four weeks. Both quantitative and qualitative data were collected during the study. While quatitative data was collected through vocabulary pre and post-tests, the qualitative data was obtained via observations and semi-structured interviews.

Keywords: Vocabulary development, digital games, computers, ELT, edutainment



Academic discipline: English language teaching, english medical purposes
Paper ID : 339

Online Learning Readiness: A case study in the field of English for Medical Purposes

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The purpose of current study is to find out online learning readiness level of medical students at a university in the northeastern part of Turkey. As a part of a program development process with a focus on online Medical English, the researcher aimed to determine about 200 medical students' online learning readiness level. To this end, Turkish version of Online Learning Readiness Scale (OLRS) was employed [original version by Hung, Chou, Chen and Own (2010) and Turkish version by İlhan ve Çetin (2013)]. A total of 189 students completed the scale.

Keywords: English for medical purposes, ELT, online learning, online readiness



Academic discipline: Educational science
Paper ID : 346

Attitudes of Foreign Language Teaching Students and Teachers about Interactive Whiteboards

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It is known all over the world that the role of technology in economic and agricultural In this study, researcher tried to understand Foreign Language Teaching (English Language Teaching – ELT, and German Language Teaching – GLT) students' and teachers' attitudes on interactive whiteboard (IWB) that they would use in language teaching. A descriptive study was selected by using survey method. In this respect, data were gathered from 210 ELT and GLT students and 8 teachers from these two language teaching departments in Erciyes University. Two questionnaires prepared by Manny-Ikan and Dagan (2011) were administered to understand attitudes of students and teachers: Teacher Attitudes Questionnaire (TAQ) and Students Attitudes Questionnaire (SAQ). According to results; students mostly see learning via the IWB is enjoyable, easier, understandable, favourable, and interesting. Moreover, teachers mostly expressed that instruction with IWB is more enjoyable, brings more workload, allows better access to up-to-date learning materials, and contributes teachers' professional development.

Keywords: Interactive White Boards, Attitude, Language Teaching

Academic discipline: Educational science
Paper ID : 348

**Social Studies Programs In The Context Of National Unity And Solidarity And
Patriotism**

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In the context of philosophy; the lesson of social studies aims to raise individuals who are committed to their country and nation. In this regard, it is encountered as an important lesson where the foundations of national unity and solidarity are laid. Considering the social studies programs of 2005; it is observed that a great attention is paid to bringing some values in students like Respect for Flag and Independence March, Patriotism, Sensitivity to Historical Heritage and Independence. Our study will evaluate the social studies programs of 1998-2005. Being among the qualitative research methods; document review technic is used in the study. Document review comprises the analysis of written materials. In the end, the study will reveal the evaluation of social studies programs of 1998-2005 in the context of national unity and solidarity.

Keywords: Social studies, patriotism, national unity and solidarity.



Academic discipline: Educational science
Paper ID : 349

Teacher and Instructor Qualifications Issues

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Of course, teachers and instructors have an important role and function for qualified education. In other word, teachers' and instructors' quality effects quality of education directly. Of course these elements effect quality of education: student, family, school, programme, education system etc. All the same, teacher's and scholar's statute is special. Besides, sometimes it is possible that other factors can take over. These factors can be classified with these titles: economic, social, cultural, political etc.

Of course improving all factor makes easy to reach targets more quickly. However, it is impossible that all of factors desired level. Against all of efforts and condition, there are some missings. Important thing is removing impossibilities' missings with possibilities. Family's economic situation can form negative factor for child's education. In this situation, social state or family's social surroundings milieu can move in. Thus, a deficiency can be removed. Similar solutions can be found for another deficiencies. All the same, founding effective and alternative solutions similarly for teachers and instructors is not easy.

To date, teacher sufficiency is done discussion subject frequently. Absolutely, it is important for train qualified teacher but it isn't enough. Because this discussion always can't be done well. Political factors have power for guide education. Unfortunately, this power can't develop positive.

Sometimes people who are discussing about teachers can be discussion subject. For example, assessment and evaluation problems can be done in seminar about assessment and evaluation. On the other hand, instructors' sufficiency must be discussed who train teacher. Because there are important problems about instructors which are training teacher.

Many problems can be brought forward about teachers and instructors. In this communique, we will accentuate on one of the problems which is mentioned. This problem is a missing which can be observed in all walks of social life. Insincerity is one of the biggest problem for teachers and instructors as the other jobs. Unfortunately, it is possible that we can experience this problem frequently. For example, many teachers and instructors break the basic rules of Turkish. There are literature teachers which have literacy problems, there are mathematicians which have problems about numbers similarly. However, students will not do or will not be able to do things which can't be done or aren't done by their teachers.

At this point, many examples can be given; but positive examples must be brought forward instead of negative examples. In this context, many examples can be used; but it is impossible to touch all of them, of course. So, only the noteworthy rumour will be given. Because there is a good role model for teachers and instructors in this rumour.

According to rumor, a man takes his child to the bookman. He is complainant from his child's eating honey extremely. In this way, he is worried about his child's possibility of illness. The bookman sends him without meeting child. He say him: "Not now, come forthy days later.". The man come back to home, inevitably. When he comes to the bookman after forthy days, the bookman meet child in his room. After that, he said child's father: "Now, you can go.". The man come to the bookman after three-four days. He say: "Hey! As it is so easy, why do



you make us wait fourthy days?“. The bookman answer him: “Fourthy days ago, I was eating honey, too. I am not have the face to say ‘Don’t eat!’ to the child while I was eating.”
The bookman’s sensitivity is the best example to sincerity, guileless, honesty or intimacy. Today, necessary thing which required for our education system and all of education community is this sensitivity, sincerity, guileless, honesty and intimacy. Important and valuable thing is forming good example to the students, being role model; not advicing them.

Keywords: Teacher qualification, instructor qualification, qualifications issues.

