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**AUGUST 7-8, 2019**

George Mason University, JOHNSON CENTER, Fairfax, VA, USA  
Washington D.C. Area

**ABSTRACT BOOK**

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Dear Guests...

Welcome to IETC, IDEC, ISTEAC & ITEC -2019 at School of Education, George Mason University, in Fairfax, VA, USA.

IETC, IDEC, ISTEAC & ITEC -2019 Conferences are now well-known international academic events and the number of paper submissions and attendees are increasing every year. This year we have been organizing 19th IETC Conference. Together with IETC 2019, we are organizing four other conference; these four conferences have received more than 250 applications. The Conference Academic Advisory Board has accepted approximately 200 papers to be presented.

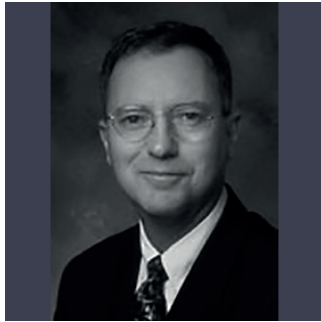
We would like to thank George Mason University for hosting us here during two days. Also, we would like to thank to our distinguished guests, keynote speakers for their collaborations and contributions to the success of these conferences. And we would like to thank all of you for coming, presenting, and joining in these academic activities.

We would like to wish you all a successful conference, pleasant stay in this prestigious university and good time in beautiful city of Washington D.C

Thank you...

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Prof. Dr. AhmetESKICUMALI

## KEYNOTES



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Applying technology solutions to complex endeavors*



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*Speech Title: The Impact of Technology on the Future of  
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## A COMPARISON OF THE PRETENDING ELEMENTS BETWEEN CONSTRUCTIVE PLAY AND PRETEND PLAY

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### Introduction

Pretending elements are ‘as-if’ elements. Pretending, in that it represents reality in ‘as if’ terms. Pretending elements demand symbolic transformation, that is, pretending a role, pretending with an object, and pretending a situation. The term ‘pretend play’ is named as a symbolic play, imaginative play, make-believe play, fantasy play, and dramatic play. Pretend play allows children to explore their fears in a safe setting. A child can begin to overcome his or her fear of doctors by donning a lab coat and stethoscope and becoming the person who scares him or her. He or she replaces his or her fear with a sense of control (Colker, 2015). Through their pretend play, children create new pretend situations. These can contain within them a wide range of seemingly unconnected elements all drawn from the child’s previous experiences. Pretend acts as a way of unifying experiences, knowledge, and understanding, helping the child to discover the links between the individual components. As children control the pretend play, they are also able to control its components. Children bring to the pretend to play existing knowledge, skills, and the understanding of the world, which they then assimilate within an existing scheme or create new and novel interconnections (Kitson, 2015; Wood, 2004).

Constructive play also has pretending elements. Constructive play involves open-ended exploration and gradually more functional, then evolving to ‘make-believe’ transformations. Four- and 5-year-olds often switch back and forth between constructive and pretend play, and it can be difficult to distinguish between the two forms of play (Kostelnik, Soderman, & Whiren, 2007; Drew, Christie, Johnson, Meckley, & Nell, 2008). The block construction, even without clear representational status for cars and trains, are symbolic expressions (Forman, 2006). Both pretend play and constructive play include symbolic modes of representations (Kostelnik, Soderman, & Whiren, 2004).

### Research Questions

The main research questions posed in this study are as follows:

1. What are the pretending elements that appeared in constructive play?
2. What are the pretending elements that appeared in pretend play?
3. What are the teacher’s roles to enhance the pretending elements in constructive play and pretend play?

### Methods

**Participants.** The participants for this study were ninety-eight 5-year-old children (49 boys and 49 girls) attending childcare center and kindergarten located in A and S city in South Korea.

**Observation.** The place of block play was set up in an extra room separated from their classroom in the kindergarten and childcare center. The location for ‘pretend play’ was set up in their classroom in the childcare center. Ninety-eight (98) children were divided into 25 groups, 5 or 6 children were placed together, and they participated in block play sessions twice a week, and they participated in pretend play sessions once a week. They were grouped with the same classmates, and 2 girls 3 boys were one group or 3 girls 2 boys, or 3 girls and 3 boys were one group.

One play session lasted for 30 - 40 minutes. During the first 10 of 40 minutes, introduction activities were conducted by research assistants and constructive play sessions and pretend play sessions lasted for 30 minutes. They read storybooks to the children to stimulate constructive play and pretend play. The storybooks provided for block constructive play were *The Three Little Pigs*, *Hensel and Gretel*, *The Wizard of Oz*, *Manhee’s House*, and *Block City*. The storybooks provided for clay dough constructive play were *The Story of the Little Mole*; *Who Knew it was None of His Business*, *Cosmos*, *The Man with a Lump*, *The Rainbow Fish*, *Childcare center*, *Breathing Pot*, *Transportations*, and *The Little Penguin Pororo*. The storybooks used for pretend play were, *If I have My Mom and Dad*, *My Mom is Pilot*, and *Sleeping Beauty*.

Materials for block play and pretend play.

1. Constructive Play. Unit Block designed by Caroline Pratt, Lego Block, and Clay Dough consisted of five colors (white, black, red, blue, yellow) were provided for constructive play.
2. Pretend Play. a) House Miniature that consists of living room, room, bed, closet, kitchen, table, chair, refrigerator, garden, car, parking lot. b) Community Miniature that consists of a hospital, police station, a post office, a big market, buildings, a church, and a street. c) A miniature castle was provided for pretend play. In addition, props, dolls, and role-play costumes were provided.

## Results

### 1. The pretending elements that appeared in constructive play

Table 1 shows the pretending elements that appeared in constructive play.

Table 1. The pretending elements that appeared in constructive play

Categories	Items	Explanations (Definitions)	Examples
Self-subjective pretend play	Pretending to play a role	Pretending of person, or personalized animals or objects	<i>After reading [The Three Little Pigs] fairy tale, a child construct three little pig's house and then point to himself / herself. "I'm the third pig. Oink-oink."</i>
	Pretending play with an object	Pretending of un-personalized objects or animals	<i>A child pretend as a tree behavior</i>
	Pretending a situation	Pretending a time or a space situation	<i>"Here is under the sea."</i>
Projective pretend play	Pretending to play a role	Pretending of person, or personalized animals or objects	<i>After making a pig by clay dough and point to the construction, "This is the third pig. Oink-oink."</i>
	Pretending play with an object	Pretending of un-personalized objects or animals	<i>After making a pot by clay dough and point to the construction, "This is a pot."</i>
	Pretending a situation	Pretending a time or a space situation	<i>"Now is night."</i>

(Source: Adapted from Exploring the Pretending Elements in Block Play, by J. H. Park and S. S. Han, 2017, *International Journal of Early Childhood Education*, 23(5), 23-38.)

### 2. The pretending elements that appeared in pretend play

Table 2 shows the pretending elements that appeared in pretend play.

Types of pretend play	Categories	Sub-Items	Explanations (Definitions)	Examples
Theatrical Pretend play	Pretending to Play a Role			

Table 2. The pretending elements that appeared in pretend play

**This work was supported by a Research Grant of Andong National University.**

## A PILOT STUDY ON THE COMPARISON BETWEEN BLENDED AND F2F LEARNING METHODS IN A SQL COURSE

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### **Abstract**

One of the main outcomes of the current period is the to decrease in the cost and energy of accessing the information due to rapid growing of internet and Information Technologies. Therefore, transferring online courses to users via e-learning platforms has become more and more preferred in recent years. This paper aims to investigate the effect of an online course designed in Google Course Builder to teach introductory level SQL (Structured Query Language) on students' knowledge and skills on use of SQL. 61 undergraduate students from a private university in Turkey who were enrolled in "Basic Computer Applications" course participated in this research. To establish an experimental research design, the students were randomly separated into experimental and control groups. Blended learning method was applied to the experimental group whose participants enrolled in the online course (SQL Course) and face-to-face (F2F) method was applied to the control group with the same learning content. While SQL Mid-Test was only conducted to observe the change of experimental group, SQL Final Test was applied to both groups. Since the sample size of the experimental group is under 30 and a normal distribution was not found, Mann-Whitney U Test was performed to compare the means of experimental and control groups. To compare the means of SQL Mid-Test and SQL-Final Test, Wilcoxon Signed-Rank Test was performed. After two weeks of experiment, it was found that there is a significant difference between two groups in favor of participants taught with F2F method. It was also revealed that slightly but significant improvement were found on the academic performance of the experimental group. On one hand, the comparison between two groups demonstrated the constraints for learning a scripting language in a short time, however on the other hand results also showed the positive effect of blended learning environment to students' learning performance towards using introductory level SQL. All findings of the study were discussed in the light of relevant literature.

## A POSSIBLE BREAKTHROUGH IN DIGITAL TUTORING

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### **Abstract**

The Defense Advanced Research Projects Agency (DARPA) initiated a program using machine intelligence to design and develop digital tutoring for novice information technology (IT) technicians. Independent assessment of the Tutor's instructional effectiveness was provided by the Institute for Defense Analyses. It performed two separate assessments of the tutor: training for newly recruited Navy sailors and training for military veterans. Participants in both groups had little, if any prior experience with IT maintenance or trouble shooting. Assessments of IT knowledge and troubleshooting found that after 16 weeks of digital tutor training, the Digital Tutor recruits substantially outperformed other recruits who received 35 weeks of classroom IT training and Navy technicians with an average of 9 years IT experience in the Fleet. In both cases, scores of the digital tutor recruits were 3-4 standard deviations above those of the more traditionally trained students and the experienced Navy technicians. Substantial monetary return on investment was found by comparing seven years of on-job-training provided after traditional IT training with the 16 weeks of digital tutoring. In the second assessment, veterans from all Services received 18 weeks of digital tutor training. Upon graduation, the veterans were then hired into civilian IT positions intended for technicians with 3-5 years of experience. Analysis determined that, over a 20-year period, the net revenue returned to the government would substantially exceed that obtained from 4-year college graduates who did not receive VA assistance and more than twice that of 4-year college graduates who did receive VA assistance. Overall, the internal rate of return to the government over 20 years was estimated to be about 35 percent.

## **A STUDY ON THE INFLUENCE OF NEWS RELIABILITY AND FALSE CONSENSUS EFFECT BY USER'S EXPERIENCE OF DIGITAL NEWS, PERCEIVED USEFULNESS, PERCEIVED RISKS AND PERCEIVED BIAS**

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### **Abstract**

This study studies how algorithmically generated digital news platforms influence the user's reliability of digital news and false consensus effect in algorithm age. Specifically, how the variables of the user's interaction with the content, the perceived usefulness, perceived general risk and the perceived bias effect the user's reliability of news and the user's false consensus of public opinion.

Firstly, the factor analysis of the effects resulting from user's experience is separated into three categories: the users as 'spectator (passively interacting with content)', the users as a 'communicator (actively interacting with content)' and the users as 'producers (creators of content)'.

Secondly, the regression analysis shows the users who have experience of 'a communicator' and 'a producers' have a positive effect on news reliability. Additionally the user's perceived risk and perceived bias of digital algorithm news have a positive effect to news reliability.

Thirdly, user's experience of digital algorithm news as 'a spectator', 'a communicator' and 'a producer' have a positive effect on false consensus of public opinion. In addition, the user's perceived usefulness and perceived bias have positive effects on false consensus.

These findings suggest that the more users feel knowledgeable about the digital platforms and interactive with digital news and the more they actually have the experience of creating an agenda, the more they trust digital news. Therefore, it is necessary to promote an active user experience of digital news, that is, news literacy of producing news. Also, these findings suggest that the more users perceive risk of digital algorithm news and the more users perceive bias of news, the more users are reliable to digital news. Recognizing the risk of digital algorithm news is also important in shaping news credibility. Recognizing bias also has an important effect on the formation of news credibility. In addition, third finding suggests that all three user's experiences of digital news as 'a spectator', 'a communicator' and 'a producer' have effect on false consensus which is tendency to believe that his thoughts, attitudes, and actions were universal, not unlike others. Also it indicates that the more users perceive usefulness and bias of digital news, the more users overestimate the extent to which one's own thoughts and others' thought agree. The more users perceive digital news as useful and biased, the more people tend to believe it will be the same as their attitudes and beliefs.

**ABOVE SEMIOLOGY COMPARING AND CONTRASTING THE REFLECTIONS OF  
HOLLYWOOD ACTORS AND ACTRESSES ON YEŞİLÇAM ACTORS AND ACTRESSES IN THE  
1950-1970 PERIOD**

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**Abstract**

It is an indisputable fact that Hollywood, as the birthplace of the movie industry, influences world cinemas. The aim of this article is to explain the effects of Hollywood actors and actresses on the structuring of Turkish cinema Yeşilçam period actors and actresses by using the data of semiotics. It covers the tone, body language, and all visual elements. Such as Clark Gable look and his moustache, Kim Novak's posture, hair, and his gaze at the camera.

## AN ANALYSIS OF EFL STUDENTS' PERCEPTIONS OF SUSTAINED SILENT READING (SSR)

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### Abstract

In the era of smartphones, students are spending far more time using social media than reading for pleasure or educational purposes. Youngsters these days are easily-bored and lack the attention span to read for a long period of time. As a result, although having proven itself as an effective implementation in ELT classes, Sustained Silent Reading (SSR), which requires students to read silently in the class without interruption for a certain amount of time, has become a less popular part of EFL teaching programs. In an attempt to investigate the new generation's approach to SSR, this study examined EFL students' perceptions on a five-week practice of SSR, which was conducted among 18 participants at an English preparatory school in a public university in Turkey. Two types of data collection instruments were employed in this study. First, the students were given questionnaires. Second, interviews with three randomly chosen students were carried out. The study showed that the students found the practice of SSR enjoyable, motivating and helpful in terms of improving their language proficiency. The positive implications of the study suggest that SSR practices should be incorporated into ELT programs to help improve both the students' attitude towards reading and their proficiency in the target language.

## AN EYE TRACKING STUDY OF VISUAL EXPLORATION PATTERNS IN INFORMATION VISUALIZATION

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### **Abstract**

This study intended to analyze students' eye behavior while viewing and observing complex instructional visuals. Therefore, complex information visualization was presented to approximately 40 undergraduate students to collect and investigate eye movement patterns using eye tracking technology. Eye movement data such as scan path were collected. Then, a qualitative content analysis approach was utilized. Next, thematic data analysis was conducted. Three theme patterns emerged. Findings were presented and discussed. Also, limitations of the study and recommendations for future research were presented. Findings will contribute to the knowledge of instructional design and will benefit instructional designers in various ways. For example, they will benefit instructional designers to best display and present information when designing complex information visualization.



## **AUTOMOTIVE INSTRUMENT CLUSTER AND ITS VISUALIZATION USING MODULAR INSTRUMENTATION**

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**Abstract**— in modern cars, all communication and control is based on sensors, microprocessors and actuators. High speed signals from sensors, control units, and signals for actuators are transmitted through buses. Controller Area Network (CAN) is the most common of these automotive data buses which is also used in industry because of electromagnetic compatibility (EMC). For a demonstration of this communication for education purpose, the instrument panel and its visualization were created. Demonstration panel contains gateway which simulates signals from the electronic control unit (ECU), accelerator pedal and Skoda instrument cluster. This instrument cluster shows engine speed, vehicle speed, coolant temperature and position of servo drive in two turbochargers. For data acquisition from CAN BUS a modular system CompactRio with a module for CAN BUS from National Instruments is used. The whole application is created in visual programming language LabVIEW using FPGA module. For visualization, CAN BUS communication is filtered and processed, to obtain three message objects to observe required data for visualization instrument cluster and accelerator pedal position.

## **BUILDING NEW REALITIES IN MALAYSIA: MULTI-PERSPECTIVE APPROACH THROUGH INTERACTIVE AND VIRTUAL LEARNING ENVIRONMENT IN HIGHER EDUCATION**

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### **Abstract**

The need for a more advanced and equipped educational experiences is vastly growing. The use of internet, specifically using the Web is a wealth of resources and techniques that can be adopted by the teachers and students to keep pace with the unstoppable development of teaching and learning approaches towards building new realities in the new paradigm. To make the learning process interesting and engaging is getting more and more concerns from the educators. Nowadays, new media and technology bring the new ways of communication and collaboration, which provides an opportunity to promote more effective teaching and learning.

Virtual Learning Environment (VLE) uses software collaboration tool that allows the students to complete academic tasks at their own pace, time, and location where they can participate and contribute to an electronic communication discussions that will help develop their learning and enables the students and educators to develop their analytical skills, independent thinking, and encourage progressive thought.

Interactive and Virtual Learning environment are the necessitated tool towards building a more competitive and dynamic education system which facilitates a greater learning impact based on experiential and exploratory perspective. The objectives of this paper are:

- (1) To unshackle the flexibility that interactive learning provides;
- (2) To increase the learner's awareness of the effective bridging of virtual education in business practice; and,
- (3) To reduce costs that it can bring to an education institution.

This paper is to examine the interactive and virtual learning and teaching methodology by developing new online tools to facilitate interdisciplinary learning. The objectives of this research were guided by the pedagogical principles that knowledge acquisition and learning are facilitated by interaction and collaboration with peers. To achieve this, the Virtual Learning Environment needed to offer a way of enhancing student interaction whilst providing an opportunity for peer-to-peer learning that offered unique motivational and cognitive benefits, whilst also enabling students from different background disciplines to grasp basic concept. At the same time, the interactive learning will strengthen the students' critical thinking and problem-solving skills using a much more holistic approach to learning.

This research will use quantitative method in the form for an e-questionnaire using Excel for analysis. The survey will be conducted amongst 500 STPM students and freshmen college/university students to establish a minimum representative sample size of 273 at a 95% confidence level to generate minimum representative results at response rate of 60%. Questions were set in 3 areas based on the research questions below:

1. Does Multi-perspective Approach through Interactive/Virtual Learning Environment have positive impact on student learning in higher education?
2. Does Multi-perspective Approach through Interactive/Virtual Learning Environment in higher education increases students' motivation to learn?
3. Does Multi-perspective Approach through Interactive/Virtual Learning Environment in teaching and learning in higher education develop students' independent learning?

This research will use both secondary and primary data collection methods to carry out the research. Secondary data will be collected from current research written in books, journal articles, newspapers, magazines and the Internet. These information will be used to write the literature review, while primary data will be used in discussing the research findings.

This study concludes that Interactive and Virtual learning is a strategic approach to improve quality of education since students of the present generation are conversant with internet technologies. In the same way, advancement of technology tailored to learning in higher education make a smooth transition from traditional classroom to a more experiential and heuristic student engagement, thus improving college retention rates as impacted by a more interesting and challenging learning mode.

## CASE STUDY: BEING AN ARAB UNIVERSITY STUDENT IN THE CZECH REPUBLIC

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### Abstract

This study provides an investigation into a range of activities of the Information and Counselling Center of the University of West Bohemia in Pilsen, Czech Republic and in particular its special international counselling center. This special center was opened in September 2018 as a reaction to the increasing number of foreign students coming to study in the Czech Republic. Its main aim is to provide members of foreign countries (i.e. those who do not have Czech nationality and did not study secondary school in the Czech Republic) with counselling services as well as to help them with cultural integration. Within the first phase of this project, the center dealt with Arab students only. Arab students have dealt with many various barriers during their studies at the University of West Bohemia, the most challenging of which is the obligation to study in Czech. Moreover, the student online database for exam registrations and class evaluations is also only available in the Czech language. Formally, the system considers such students to be Czech students. Despite the language barrier, it has been assumed that the operation of such a support system will help the students through the Czech educational process and will also spread awareness in relation to the country's traditional cultural beliefs and practices. The other group of students becoming part of this counselling project in May 2019 are coming from Turkey and Iran. The study presents the vision and mission of the center alongside implemented tools and activities. Most importantly, however, it also provides concrete figures on the results of the Counselling Center's year-long operation. Evaluation of this on-going project has also highlighted the fact that support must be available for tackling more everyday problems affecting individuals' personal and social lives. A number of recommendations on ways in which the services should develop, and arising from the evaluation, are put forward.

## CLoud COMPUTING ARCHITECTURAL DESIGN MODEL FOR SCIENTIFIC RESEARCH AND UNIFIED EDUCATION SYSTEM

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### Abstract

Cloud computing is becoming an adoptable technology for many of the organizations including academic institutions with its dynamic scalability and usage of virtualized resources as a service through the Internet. Cloud computing is an excellent alternative for educational institutions technology in order to operate their information systems effectively.

Academic organizations take advantage of cloud based applications offered by service providers and enable their own staff/students to perform business and academic tasks. In this paper, we will review what the cloud computing infrastructure services and deployment models in general and will provide the benefits of cloud computing in the educational field, especially in the universities where the use of computers are more intensive and what can be done to increase the benefits of common applications for students and teachers. The main important part of this research is the proposed solution based on cloud computing with all suggested services and deployments model with highlighting the main features and characteristics of the model to be a unified since research and educational model.

Suggested application, payment, security and privacy model will be discussed at the last part, and ended this research by reasonable conclusion

**CO-DESIGNING OF A MOBILE EDUCATIONAL TOOL FOR INNOVATIVE TEACHING AND LEARNING AT THE COLLEGE OF BUSINESS EDUCATION, TANZANIA**

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**Abstract**

Mobile technologies are increasingly becoming tools for enhancing access and smooth sharing of information, products, and services. In this realization, this study used a design science research users' participatory approach to co-design a mobile application prototype known as CBE Mobile Educational Tool (CBEMET) to enable lecturers of the College of Business Education (CBE) in Tanzania to share educational materials. The co-design of the prototype involved 3 researchers, one application developer and 25 lecturers of CBE. The testing of the CBEMET prototype shows that downloading and uploading of education resources to the system is adequate. The results also indicate that the prototype enables the access of uniform departmental-related materials by lecturers of the same department at different locations and, in so doing, it increases the quality of teaching and learning at the college. Furthermore, the testing of the prototype revealed that the design meets the requirements of the lecturers and has brought a significant change in their teaching and learning practices. The impact of the study is that it sets a groundwork for future studies involving lecturers in higher education and developers in co-designing and co-developing mobile education tools for innovative teaching and learning in Tanzania and in other emerging economies.

## CONFIRMATORY FACTOR ANALYSIS AND RELIABILITY OF BARRIERS TO SEEKING PSYCHOLOGICAL HELP SCALE AMONG TURKISH ADULTS

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### Abstract

Barriers to Seeking Psychological Help Scale (BSPHS) originally developed to measure refraining factors among college students to seek mental health. However, underutilization to mental health services among adults is also common and understanding to factors that inhibit adults to seek mental health help necessary. An initial step to increase to use mental health services among this population is to identify barriers inhibiting them to use such services. Thus, the purpose of this cross-sectional study was to examine the factor structure and reliability of BSPHS among Turkish adults. A convenience sample of 208 (134 female, 74 male,  $M_{age}=35.58$ ) Turkish adults completed BSPHS and a demographic information form. Confirmatory factor analysis performed to test underlying factor structure of BSPHS using three competing models. Reliability analysis also used to examine item-total correlations as well as estimate Cronbach alpha reliability. Results of this study suggests that BSPHS has a similar five factor structure as suggested by Topkaya, Şahin, and Meydan (2017). Reliability analyses also suggest that all subscales of BSPHS were adequate item-total correlations as well as Cronbach alpha reliability. BSPHS can be used to measure inhibiting factors to seek mental health among Turkish adults.

## ÇOCUK POLİKLİNİKLERİNDE KAN VERME İŞLEMİNDE SANAL GERÇEKLIK UYGULAMASINA KATILAN ÇOCUKLAR İLE KATILMAYANLARIN ANKSİYETE DUYARLILIK DÜZEYLERİNİN İNCELENMESİ

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### Özet

**Amaç:** Bu çalışma, çocuk polikliniklerinde tıbbi tedavi ve/veya tanı amaçlı kan verecek olan 6-15 yaş grubu çocuklara, kan verme işlemini basit bir dille bilgilendiren video ve 3D videoların sanal gerçeklik gözlüğüyle izletildiği deney grubu ile sanal gerçeklik uygulamasına katılmayan kontrol grubundaki çocukların, anksiyete duyarlılıklarının incelenmesi amacıyla yapıldı.

**Metot:** Araştırma,Çukurova Üniversitesi Tıp Fakültesi Balcalı Hastanesi Çocuk polikliniklerinde, 15 Şubat-15 Mayıs 2019'da, deney grubu (n=30) ve kontrol grubuyla (n=30) yürütülen, randomize kontrollü deneysel bir çalışmadır. Araştırmada Everest VR-0022 VR BOX sanal gerçeklik gözlüğü, akıllı telefon, Sony MDR-EX650AP kulaklık kullanıldı. Veri toplamada anket formları olarak, kişisel bilgi formu, Çocuklarda Anksiyete Duyarlılık Ölçeği kullanıldı. Deney grubundaki çocuklar, kan verme işlemi sırasında, 3-10 dakikalık, dans, su parkı, hayvan belgeseli, keşif gezisi ve uzay belgeseli içerikli videolardan istediğini seçerek sanal gerçeklik gözlüğü ile izledi. Çocuklara izletilen 3D videolar, çocuk sağlığı ve hastalıkları hemşireliği alanında uzman araştırmacı tarafından, gelişimsel yaş dönemleri dikkate alınarak bilgi ve içerik düzenlemeleri incelererek seçildi. Videolar, web 2.0 aracı olan Powtoon uygulamasıyla hazırlandı. Verilerin analizinde SPSS programı kullanıldı.

**Bulgular:** Sanal gerçeklik uygulamasına katılan çocukların fiziksel, psikolojik ve sosyal anksiyete duyarlılık ölçek puanı ile toplam ölçek puanı (47.93±12.72, min=30, max=75) uygulamaya katılmayan (34.43±13.03, min=15, max=75) gruba göre düşük ve istatistiksel olarak anlamlıydı (p<0.001).

**Sonuç:** İnvaziv girişim olan kan verme işleminde, sanal gerçeklik uygulaması, çocukların anksiyete düzeylerini azalttığından kullanılması önerilmektedir.

## ÇOCUK YOĞUN BAKIM ÜNİTESİNDE YATAN HASTALARDA SEDASYONUN ÖNEMİ VE HEMŞİRELİK BAKIMI

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### Özet

Yoğun bakım üniteleri (YBÜ), yaşamı tehdit altında olan bireylere, olabilecek en üst düzeyde yarar sağlamak amacıyla kullanılan çok sayıda yaşam kurtarıcı teknolojik araç gereçlerin bulunduğu, disiplinler arası bir ekip yaklaşımının zorunlu olduğu bakım merkezleri olarak tanımlanmaktadır.

Çocuk yoğun bakım üniteleri anksiyete ve ağrı tedavisinin önemli olduğu yerlerdir. Çocukların yoğun bakım ünitesinde buldukları sırada yaşadıkları anksiyete, korku ve ağrı deneyimi birçok faktörle ilişkilidir. Bu faktörler, aileden ayrılma, alışılmış olan gündüz-gece döngüsünün bozulması, sürekli gürültülü bir ortam, yabancı insanlar ve cihazlar, invazif girişimler ve mekanik ventilasyon. Mekanik ventilasyon uygulanan hastalar tüm bu faktörlerin yanında aynı zamanda yapay hava yolu nedeniyle iletişim kuramamanın getirdiği sıkıntıyı da yaşarlar.

Sedatifler ve analjezikler anksiyeteyi, ağrıyı ve ajitasyonu azaltır. Sedasyonda hedef; koopere olunabilen, kabul edilebilir sükunette, ağrıdan uzak, yoğun bakım uygulamalarına uyum gösteren hastadır. Bu hedefe ulaşmak için; ilaçların analjezik, anksiyolitik, amnezik, antidepresan, hipnotik ve bazen de kas gevşetici etkilerinden yararlanır. Sedasyon tedavisi tüm bu olumlu etkilerine karşın, yetersiz ya da gereğinden fazla kullanıldığında hastalarda fiziksel ve psikolojik olarak çeşitli zararlara neden olmakta ve hastaların hemodinamik ve metabolik değerlerinin bozulmasına yol açabilmektedir. Yetersiz sedasyon tedavisi, hastalarda ventilatöre uyumsuzluğa, oksijen tüketiminde artışa, hastanın kateter ve sondalarını çıkartmasına, posttravmatik stres bozukluğuna neden olabilmektedir.

Sedasyon uygulamasında istenilen sedasyon düzeyine ulaşabilmek için; hasta değerlendirilmeli, gerekli sedasyon hedefi belirlenmeli ve analjezik ve sedatif seçimi yapılmalıdır. Sedatif ilaçların sürekli uygulanması, mekanik ventilasyon süresini, yoğun bakım ve hastanede kalış sürelerini uzatmakta, günlük nörolojik muayenelere engel olmakta, mental durum değişikliklerini değerlendirmede kullanılan testlerde artışa neden olmaktadır. Uygulanan sedatiflerden sonra hastanın sedasyon düzeyi yeniden değerlendirilmeli, tedavinin seyri ve olası beklenmedik etkiler değerlendirilmelidir.

Hastanın tedaviye yanıtının değerlendirilmesine olanak sağlayan geçerliliği ve güvenilirliği kanıtlanmış ağrı ve sedasyon değerlendirme ölçekleri kullanılmalı, ağrı tedavisi hastaya göre seçilmeli, yapılan tedavilerin etkinliği değerlendirilmeli ve bu basamaklar kayıt edilerek ekip ile paylaşılmalıdır.

Çocuklarda sıkıntıyı değerlendirme ve farmakolojiyi koordine etme sorumluluğunu hemşirelerin primer sorumluluğudur. Ciddi ve karmaşık sağlık sorunları ile mücadele etmek zorunda olan hastaların tedavi gördüğü YBÜ'de hemşirelik bakımı büyük önem taşımaktadır. Hemşirelerin yoğun bakım hastasına bütüncül yaklaşabilmesi ve kaliteli bakım verebilmesi için, öncelikle hastanın sorunlarını tanıması, bu sorunlara yönelik girişimlerde bulunması ve bunun için de hemşirelik sürecini hasta bakımında kullanması gerekmektedir.



## DEVELOPMENT OF A MODEL FOR DESIGN OF DIGITAL MIND GAMES IN TEACHING OF TURKISH COURSE BASED ON ITS' EFFECT ON WRITING SKILLS

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### Abstract

Communication skills also play an important role in maintaining a healthy social and work life. Skills such as speaking, writing, reading and listening are well known contributing also to academic success in almost all disciplines in lifelong learning. Turkish courses aims to gain such skills to students in almost all levels of formal educational. In Turkey, although new Turkish teaching programs for mother tongue training includes multi-stimulating activities that enhance teaching and learning environments. Beside that activities, technology enhanced activities are required to train the manpower of 21century donated with higher thinking skills such as critical thinking, creativity and problem solving which are all closely related with communication skills. Mind games are the activities that could be applied both in technology enriched and classical Turkish teaching environments are believed to improve these higher order skills. Mind games play an important role in making individuals to be aware of their potential, to make rapid and correct decisions, to create original solutions to problems, to improve themselves. Moreover, mind games contributes to develop interaction within teacher and students through collaborative and cooperative activities which improves team working and making course and school environment more interesting. The aim of this experimental study is to search the applicability of mind games to Turkish teaching courses. Qualitative and quantitative research methods were used. The effect of using mind games to writing skills in a classical teaching environment were investigated. Control and experimental groups of this study were selected from seventh grade students (25 control and 25 experimental) from a secondary school. The results of this study indicated that experimental group that used mind games activities were significantly more successful than control group that were instructed with traditional method. Based on this result, a model for the design of mind tool activities digitally will be developed.

## DIGITAL CITIZENSHIP: A THEORETICAL REVIEW OF THE CONCEPT AND TRENDS

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### **Abstract**

This article aims to analyze the concepts and tendencies identified in research conducted on digital citizenship in the last ten years. To satisfy this objective, search parameters were established for articles in specialized databases. Within the results, the prevailing categories were concepts, abilities, empowerment, instruments, programs and technologies that favor digital citizenship. The main findings include that different definitions exist of the concept of digital citizenship and that information and communication technologies contribute to access to information, though not equally at the global level. Additionally, digital citizenship is promoted by different initiatives such as programs focused on citizen participation. Thus, research focused on digital citizenship adopts a transcultural perspective in educational, social, public and private arenas.

## DISTANCE LEARNERS' AWARENESS ABOUT OERS

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### Abstract

This paper intends to reveal the results of a study in which distance learners' perceptions and awareness about open education resources were investigated. Openness in education is a movement about knowledge sharing, requirements of access, social justice, and capacity building. Open Education Resources (OERs) movement has been considered as another important milestones of openness in education. According to UNESCO (2018) open education resources (OERs) are teaching, learning and research materials in any medium -digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no limited restrictions. OER movement holds great potentials for different stakeholders such as educators, students, self-learners, and governments: Increasing access to quality educational materials, reducing the costs, improving student learning, enriching life-long learning opportunities, showcasing research to widest possible audience, enhancing a school's reputation as well as that of the teacher or researcher, creating opportunities for peer review, maximizing the use and increases availability of educational materials, and raising the quality standards for educational resources by gathering more contributors.

OER movement is still in awareness stage in Turkey despite the large-scale implementations, such as the Academic Informatics Network (EBA) Project of the Ministry of National Education (MoNE), Open Courseware Project, etc. These and more macro level initiatives are introduced later in this report. Meanwhile, the literature in Turkey concerning OERs is quite weak. Only three research studies have been published directly related to OERs and all of them focused on educators. No study found in the literature regarding perceptions of the learners about OERs. Since investigating the phenomenon in different contexts can provide better understanding, we need more studies focusing on different aspects, different stakeholders as distance learners.

This descriptive study was conducted to examine distance learners' perceptions and awareness about open education resources. It was conducted in Anadolu University distance learning programs. An online questionnaire to examine the distance learners' awareness about OERs and found out that a big majority of the 751 participants (around 65 percent) confuses OERs with formal open/distance learning courses. This study also revealed services that may increase the learners use of OERs. Moving an upper module after getting a sufficient grade in exams (62 percent of all the participants), getting a professors/instructors' support (58 percent), receiving a certificate after completion (49 percent), and having automated feedback about how successfully answered the questions in quizzes (45 percent) were regarded as important services (or characteristics) that might increase the use OERs by a big number of the participants. Surprisingly, activities require peer feedback (15 percent), teamwork (17 percent), and earning batches (19 percent) were found not as important as other services. This study additionally shown that OERs created and uploaded by a credible institution/person, easy to download, directly related to the user's field of interest and needs, includes clear learning objectives, have a high download ratio, and recently created, uploaded or revised were the factors affecting the learners usage of OERs. Interestingly only a few participants found the copyright issues as important as others. Furthermore, the participants noted insufficient quality, shortage of updated resources, inadequate internet connection for downloading and uploading, shortage of resources related to the fields of interest, and lack of experience about how to locate OERs as the most frequently barriers for use of OERs. In sum, there is a misunderstanding about definitions and understanding of OERs in Turkey. Quite a number of learners confuse OERs with open education courses and programs. There is a shortage of awareness and perceptions regarding OERs. It might be related to cost of access to textbooks, internet access, and some cultural characteristics.

## EFFECT OF BLENDED LEARNING APPROACH ON THE PERFORMANCE OF TECHNICAL COLLEGE STUDENTS IN WOODWORK, IN OYO STATE, NIGERIA

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### Abstract

Blended learning approach is an education program that combines online digital media with traditional classroom methods which requires the physical presence of both teacher and student, with some element of student control over time, place, path, or pace. In this study, the researcher examined the effect of blended learning approach on the performance of technical college students in woodwork, in Oyo State, Nigeria. The study was a pretest, posttest control quasi experimental type. Purposive sampling technique was used to select two co-educational technical colleges in Oyo State. Twenty (20) students of Government Technical College Ibadan were used for Blended Learning Approach (BLA) as experimental group while also 20 students of Government Technical College Awe participated as control group for Conventional Learning Method (CLM). Three research instruments were used for this study, Blended learning approach package on introduction to woodjoint, Learners' achievement test (LAT) and Questionnaire on students' attitudes towards blended learning approach (QSATBLA). BLA package was evaluated and validated by educational technologists to ensure that the package is developed in line with the principle of instructional design while ICT expert ensured that navigation process runs appropriately. LAT was subjected to reliability using Kuder-Richardson formula 20 (KR-20) with the reliability index of 0.81 while QSATBLA also subjected to reliability utilizing Cronbach alpha with an index of 0.85. The findings of the study showed that there was a significant difference in the mean scores of experimental and control groups ( $t(38)=2.021 > p0.05$ ) in favour of the experimental group and there was significant difference in the attitude of experimental and control groups with  $t(38)=3.623 > p0.05$ ). Based on the findings, it was recommended among others, that teachers in technical colleges should expose themselves to various available instructional software packages that can foster improve their teaching strategies and further enhance teaching competency and students should be exposed to blended learning approach to promote and encourage positive students' social interaction.

## EFFECTS OF CONCEPT CARTOONS ON NIGERIAN PRIMARY FOUR PUPILS' ACHIEVEMENT IN BASIC SCIENCE AND TECHNOLOGY

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### Abstract

The Study investigated the effects of concept cartoons on primary four pupils' achievement in Basic Science and Technology in Jos, Plateau State of Nigeria. A sample of 70 pupils from a population of 2000 pupils was used in the study. Non-randomized pre-test, post-test quasi experimental control group design was employed. Two intact classes in one, out of 50 schools in the area of study were assigned to experiment and control groups, respectively. The experimental group was taught the concept of energy and its conversion using concept cartoons while the control group was taught the same concepts with the talk and chalk method. A basic science and Technology Achievement Test with a reliability index of .85 was used to collect data from the pupils. Two research questions were answered using mean and standard deviation while two hypotheses were tested using Analysis of Covariance at 0.05 level of significance. Findings indicated that the experimental group taught using concept cartoons achieved higher than the control group taught using the talk and chalk method  $F(1, 78) = 6.819, p = .011$ . Moreover, gender was found to have a significant influence on the achievement of four primary four pupils exposed to concept cartoons in favour of boys  $F(1, 78) = 6.802, p = .013$ . It was concluded that the use of concept cartoons significantly improved the achievement of primary four pupils in Basic Science and Technology. In the light of the findings, it was recommended that teachers should incorporate concept cartoons in teaching Basic Science and Technology concepts.

## **EFFECTS OF CONCEPT MAPPING ON TEST ANXIETY AND ACHIEVEMENT IN MATHEMATICS AMONG STUDENTS IN LAGOS ISLAND, NIGERIA**

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### **Abstract**

There is an increasing recognition that affective factors play a critical role in the teaching and learning of mathematics. One affective factor that has probably received more attention than any other areas that lie within affective areas is anxiety towards mathematics. This study, investigates the relative efficacy of one training method (Concept Mapping) on Test Anxiety and Achievement in Mathematics among selected secondary students in Lagos Island metropolis. The participants comprised one hundred and fifty secondary school students (74 boys and 76 girls) whose two intact classes were randomly selected from class streams among two randomly selected schools in Lagos Island Metropolis. Two instruments were used in the study: Anxiety Rating Scale (Mathematics) and Mathematics Achievement Test (MAT). All instruments were used for Pre and Post test assessment test. Three research questions were raised and three research hypotheses were formulated to guide the study. The research design was quasi experimental pre and post test control design. Data were analysed using t – test and Pearson Product Moment Correlation statistics. Findings revealed that there was a significant difference in post test scores in mathematics anxiety scores of participants in the experimental groups. There was also a significant difference in post test scores in mathematics achievement of participants in experimental groups. Similarly, there was a significant difference due to gender in mathematics achievement post test scores of participants in experimental groups. Consequently, the three hypotheses were rejected ( $P < 0.05$ ). Concept Mapping has evidenced a better learning strategy in mathematics and therefore recommended that teachers should be trained and adopt the use of concept mapping as an instructional option.

## EUROPEAN EMERGENCY NUMBER ASSOCIATION AS AN ANSWER TO A LACK OF EDUCATION FOR EUROPEANS

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### Abstract

There are many threats in the world, which is why it is so important to counteract them quickly and effectively. It is possible to do this by reporting dangerous situations to the emergency number. The creation of the European Union has enabled us to undertake many joint actions aimed at improving many processes taking place between the countries of the European Union. One of them is the possibility of calling emergency numbers free of charge, the pan-European emergency number is 112. The idea behind the creation of a Europe-wide emergency number was to provide all citizens with access to assistance from emergency services, regardless of the country they were currently in. As can be seen from the analysis of documents and conducted tests with experts (37 interviews with experts), there are many problems. In most cases, the public does not know what the emergency number is for. It can be stated that this is the result of a lack of knowledge in this area. Therefore, in order to solve the problems faced by European Union countries and to improve the security and protection of citizens, the European Emergency Number Association (EENA) was established. It is a non-governmental organization which gathers over 1500 representatives of emergency services from over 80 countries around the world, 11 international organizations and over 90 scientists. The group is a platform in which to search for practical solutions to problems experienced by emergency services at the local, regional and national level, it deals with the implementation of new technologies for efficient communication between emergency services and works to spread knowledge among Europeans about the 112- emergency number. The article will present problems related to making calls to the 112- emergency number, the idea of creating the EENA platform, practices and assumptions proposed by EENA and solutions in the field of education of Europeans in the use and knowledge of the 112- emergency number.

## FAKE NEWS - PHENOMENON, EFFECTS, EDUCATION OF THE SOCIETY

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### Abstract

In recent years, the term "fake news" has become very popular. This term is used as a "simplified term for a means of communication that is intended to cause disinformation or fraud". As it results from the analysis of documents, Internet sources and research conducted with experts (35 interviews with experts consisting of psychologists, sociologists, police officers, members of anti-violence organizations, IT specialists and social communication specialists), "fake news" implies many negative consequences. With the development of the Internet, it has become apparent that almost everyone is able to generate a false message and then make it public with relatively little effort. The strength of such information lies in its duplication and discussion, often without critically assessing its authenticity and source. The dissemination of false information and thus misleading the public is based on three pillars: social media (as the most widely used medium of communication), tools and services, and motivation. Thanks to the growing popularity of social media, it is becoming easier to create alternative versions of reality that are difficult to verify. The effects of spreading false content led, among other things, to the volatility of action prices, influenced election results and social moods.

It is not possible to fully defend oneself against fake news, but it is possible to fight against it. The arguments and language used, the appropriate choice of quoted persons, lack of quotations, photographs, lead and title may suggest that the information may be unbelievable. Websites using video content can also help in the fight against fake news. Such content is relatively difficult to produce, expensive, and above all, even more difficult to falsify. The article will present the problems related to "fake news" and their impact on various aspects of human life. It will also indicate ways to deal with false information through different forms and methods of education of society. In recent years, the term "fake news" has become very popular. This term is used as a "simplified term for a means of communication that is intended to cause disinformation or fraud". As it results from the analysis of documents, Internet sources and research conducted with experts (35 interviews with experts consisting of psychologists, sociologists, police officers, members of anti-violence organizations, IT specialists and social communication specialists), "fake news" implies many negative consequences. With the development of the Internet, it has become apparent that almost everyone is able to generate a false message and then make it public with relatively little effort. The strength of such information lies in its duplication and discussion, often without critically assessing its authenticity and source. The dissemination of false information and thus misleading the public is based on three pillars: social media (as the most widely used medium of communication), tools and services, and motivation. Thanks to the growing popularity of social media, it is becoming easier to create alternative versions of reality that are difficult to verify. The effects of spreading false content led, among other things, to the volatility of action prices, influenced election results and social moods. It is not possible to fully defend oneself against fake news, but it is possible to fight against it. The arguments and language used, the appropriate choice of quoted persons, lack of quotations, photographs, lead and title may suggest that the information may be unbelievable. Websites using video content can also help in the fight against fake news. Such content is relatively difficult to produce, expensive, and above all, even more difficult to falsify. The article will present the problems related to "fake news" and their impact on various aspects of human life. It will also indicate ways to deal with false information through different forms and methods of education of society.



## FOR A PHENOMENOLOGICAL TEACHING

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### **Abstract**

The goal of the educator is to improve their pupils' competence, enable them to engage in the learning process, improve their skills and apply them in the work environment. As a result, "a learning process to teach" is necessary and this implies a new theoretical system, which satisfies the requirements of a model and the theory based on that model. Every position is grounded both upon epistemological principles and the practical features related to the analysis of a given "research and action" path. Clearly, educational strategies should be based upon a direction which follows the relation between theory and practice, giving a pedagogical framework for the setting of training objectives, providing education for students and future teachers, and guiding them to a specific action to be accomplished in the professional environment. It is therefore necessary to create the ideological 'subsoil' for the "action research" and to set up an effective "architecture" incorporating concepts such as "learning to learn" and "learning to become".

In the present essay among the different methods we will consider the phenomenological one. In phenomenology, the reasoning inferred restores an objective meaning to experience, and a subjective authenticity to fulfillment. Husserl's 'back to the things themselves' becomes a methodological need.

## IMPACTS OF INDUSTRY 4.0 ON EDUCATION AND JOB SKILLS OF FUTURE

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### Abstract

Considering the huge and rapid impacts of industry 4.0 on 21st century's individuals' life in all areas, each building blocks compositing the society must be carefully analyzed and planned including formal and informal institutions/organizations, government and specifically the educational system with its' dynamics. With the enormous and rapid technological steps into new age, reshaping all the ways we live today is unavoidable. This will not wait too long since the concept of "future" would be spelled in next ten years in light of those stunning developments in technology. Nowadays nobody is sure about the consequences of the developments in technologies such as artificial intelligence, wearable technologies, robotics, big data, learner analysis, genetic engineering, neurotechnology, etc. Regarding the manpower of future, considerations for the skills and knowledge that will differ from today's requirements is essential for the preparation of next generations who could maintain their life. Starting to think about possible new job types and to make plans for such job skills is vital. This study aims to explore and discuss on various impacts of industry 4.0 for educational systems and to take care important issues for the planning of educational programs/curriculum for next (in light of demand for future knowledge and skills that individuals are expected to be denoted with). As one of the most important technological innovations of our age that will have serious impacts on future world, robotics and robotics education are among the top hot topics in educational phenomenon. The applications of robotics in enhancing students' higher order skills through worldwide including Turkey are increasingly using in educational settings. In scope of this study the finger prints for the effective integration of robotic education programs in schools will also be discussed in light of present applications of robotics.

## INSTAGRAM AS AN EDUCATION PLATFORM FOR EFL LEARNERS

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### Abstract

Social media platforms have gained an exceptional popularity especially in the last ten years and become an important part of human lives. Among the popular social media platforms, Instagram is used by millions of people every day especially by the young adults. Given this significance, social media platforms have been used for educational purposes, too. Thus, this study aimed at exploring university students' opinions about Instagram as an educational platform with respect to educational and language learning purposes and its effect on students' language learning process supplementary to formal classes. Using mixed methodology, 219 university students learning English were included in the survey, and 80 students took part in the experimental part of the study which was designed to explore the impact of Instagram on students' language learning process. Six students from the experimental group were also interviewed for their opinions about the Instagram use during the experimental part of the study. Carrying out quantitative and qualitative analyses, the findings show that Instagram is the most frequently used social media platform among the participants and they favor using it for educational and language learning purposes. Additionally, it was found that Instagram had a positive impact on students' language learning based on the achievement scores. Thus, it is concluded that Instagram can be used to enhance learning of English supplementary to formal teaching by exposing the students to language while they are using this platform as part of their every day practices.

## INVESTIGATING FAN PURCHASE INTENTION: THE CASE OF TURKISH SPORT CLUBS

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### Abstract

The fans in Turkey, the love of football and basketball, the interest, embrace and integration of the country is due to the demand. This intense interest has brought success in football and basketball with the support of supporters. Football and basketball, which are identified with fans in Turkey, are seen as an economic potential for sports clubs, the degree of adherence to the clubs of fans, the increasing population and the ratio of economic value to success. The purpose of this study is to investigate the purchase intention of licensed products of sports clubs of fans in Turkey, using the theory of planned behavior. The sample of the study consisted of 310 randomly selected people living nearby the city center of Istanbul city in Turkey. According to the results of research evidenced that attitude toward behavior, subjective norms, and perceived behavioral control positively influenced the fans buying intentions. A significant difference was found in the examination of the gender with a subjective norm variable between the variables. This difference can be said that the sports club, where female participants are fans of men, is the result of separate social environmental factors and normative beliefs in the purchase of licensed sports products. The effect of perceived behavioral control on purchase intention was found stronger than the first two predictors. Although perceived control appeared to have a relatively strong effect on purchase intentions of fans, it can change over time and thus, affect the future purchase intentions. In this manner, it is of prime importance for sports clubs to integrate that into their sales strategies, because they rely heavily on the sale of their licensed products. Other implications and limitations are further discussed. On the other hand, the most important element in the purchase of licensed products of fans in sports clubs, '' Because I'm proud of my team '' is seen, '' To be noticed and to take care of '' as the least important purchasing element has been observed. When we look at the licensed products purchased by the fans, the most purchased and preferred product of the Besiktas, Fenerbahce and Galatasaray fans is the clothing, the least purchased product is the fan line.

## INVESTIGATION OF LIFE SATISFACTION OF UNIVERSITY STUDENTS ACCORDING TO VARIOUS VARIABLES

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### Abstract

Life Satisfaction is an important element of an individual's sense of well-being in general. University students have problems with life satisfaction from time to time. University years are a period in which students try their adult roles, prepare for working life and idealize their values more. The aim of this study is to examine the life satisfaction levels of university students according to gender, class, place of residence, income level, number of siblings, education level of parents and whether or not parents are alive. The research was carried out with 550 students in Kyrgyzstan-Turkey Manas University's various faculties of the ongoing 229 men, 321 male and in 2017-2018 academic year. To determine the level of life satisfaction of students developed by Diener, Emmons, Laresen and Griffin (1985) in order to The Life Satisfaction Scale adapted to Turkish by Köker (1985) and the Personal Information Form developed by the researcher were used to obtain information about independent variables. According to the results of the research, life satisfaction levels of university students vary according to income levels and place variables. Results in accordance with the findings and recommendations were made.

## INVESTIGATION ON MOTIVATION OF ONLINE READING: A CASE STUDY PREPARATORY YEAR STUDENTS

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### **Abstract**

Our knowledge of online reading motivation behavior is primarily based on limited data. The aim of the research was consequently to scrutinize students' motivation behavior toward online reading act. Therefore, this research employed a mixed method approach to satisfy the objectives of the study. Thus, data collection tools from previous research were carefully selected and modified to suit the purpose of the study. Respondents included in this study were randomly selected from the population under examination, the students of PYP at Majmaah University. The students' responses were keyed WARPPLS software. In respect to qualitative data, five students were interviewed to obtain their responses to online reading motivation behavior. The main result was students and their colleagues have a different opinion about online reading. In line with the results of the questionnaire, students' interviews revealed that they are motivated to read online for different purposes such as reading for exam, pleasure or discovering new things. These results offer an overwhelming understanding of the notion of online reading motivation and broaden our knowledge of the factors that might affect students' motivation while reading online.

## QUALITY OF LIFE AND CHILD YOGA IN PEDIATRIC ONCOLOGY PATIENTS

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### Özet

Onkolojik tanı ile hastaneye yatırılan çocuklar azalan hareket, denge gelişimi ve fonksiyonel aktivitenin azalmasından dolayı kas güçsüzlüğü yaşamaktadırlar. Kanser tedavisinde ilk basamak indüksiyon tedavisi olarak; kemoterapi, radyoterapi ve kök hücre naklini kapsamaktadır. Kemoterapinin yan etkileri arasında büyüme gelişmeyi geciktirme, depresyon, anksiyete, kronik ağrı, iştih kaybı, zayıf kemik yapısı bulunmaktadır. Ayrıca radyasyonlu kemoterapi, akciğer dokusunun enflamasyonu, enfeksiyonu, kas güçsüzlüğü ve alt ekstremitelerde denge kayıpları oluşturabilmektedir. Onkolojik tedavi gören çocukların fiziksel aktiviteleri ile ilgili rehber niteliğindeki bilgiler sınırlıdır. Bu hastaların bireysel ihtiyaçlarına uygun bir şekilde egzersiz yapabilecekleri güvenli bir ortam sağlanmalıdır. Pediatrik onkoloji hastalarına yönelik yapılan egzersizleri inceleyen çalışmalarda Yoganın; güç, denge, ağrı kontrolü ve yaşam kalitesi için pediatrik egzersiz programlarına dahil edilen bir egzersiz olduğu görülmüştür.

## READING THE STREETS OF BALAT AND URBAN IDENTITY

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### Özet

Dünyanın en büyük metropollerinden biri olan İstanbul, doğal güzellikleri, tarihi, arkeolojik mirası ve sosyo-kültürel yaşamıyla eşsiz bir şehirdir. Bu özellikler hem kentin zengin kimliğini oluşturur hem de güçlü bir kentsel imge sağlar. Şehrin tarihi dokusundan ve fiziksel unsurlarından oluşan silüet, son derece etkileyici bir manzara sunuyor. Fener-Balat, İstanbul şehrinin fiziki yapısının önemli bir unsurudur. İstanbul'un tarihi ve kültürel değerlerinin şekillenmesinde önemli bir rol oynamaktadır. İstanbul metropolünün unutulmaz bir parçası olan Türk, Rum, Ermeni, Yahudi ve Bulgar kimlikleri ile cami, kiliseler ve sinagogların bir arada bulunduğu Balat, kimliğini oluşturan güçlü unsurlara sahip bir alt bölgenin özelliğidir. Bu bölgelerin sosyal dokularında ve popülasyon kompozisyonlarında büyük değişiklikler olduğu görülmüştür. Özellikle kentleşmiş, yerleşik üst-orta sınıf ailelerin bıraktığı kentin en iç kısımları, fakir veya göçmen nüfusun yoğunlaştığı bölgeler haline geldi. Dünya sosyo-kültürel, fiziksel, ekonomik, politik ve teknolojik dinamikler çerçevesinde sürekli değişiyor ve bu değişim kentsel alanlara da yansıyor. Bu dinamiklerin karşılıklı etkileşimi sonucu şekillenen kentsel alan, her çağda, her ülkede ve her şehirde bazı farklılıklar ve benzerlikler içerir. Dolayısıyla hiçbir şehir diğerleriyle aynı şekilde şekillenmiyor. Yerleşmiş üst-orta sınıf aileleri terk etmiş, fakir veya göçmen nüfusun yoğunlaştığı bölgeler haline gelmiştir. Dünya sosyo-kültürel, fiziksel, ekonomik, politik ve teknolojik dinamikler çerçevesinde sürekli değişiyor ve bu değişim kentsel alanlara da yansıyor. Bu dinamiklerin karşılıklı etkileşimi sonucu şekillenen kentsel alan, her çağda, her ülkede ve her şehirde bazı farklılıklar ve benzerlikler içerir. Dolayısıyla hiçbir şehir diğerleriyle aynı şekilde şekillenmiyor. Yerleşmiş üst-orta sınıf aileleri terk etmiş, fakir veya göçmen nüfusun yoğunlaştığı bölgeler haline gelmiştir. Dünya sosyo-kültürel, fiziksel, ekonomik, politik ve teknolojik dinamikler çerçevesinde sürekli değişiyor ve bu değişim kentsel alanlara da yansıyor. Bu dinamiklerin karşılıklı etkileşimi sonucu şekillenen kentsel alan, her çağda, her ülkede ve her şehirde bazı farklılıklar ve benzerlikler içerir. Dolayısıyla hiçbir şehir diğerleriyle aynı şekilde şekillenmiyor. Bu dinamiklerin karşılıklı etkileşimi sonucu şekillenen kentsel alan, her çağda, her ülkede ve her şehirde bazı farklılıklar ve benzerlikler içerir. Dolayısıyla hiçbir şehir diğerleriyle aynı şekilde şekillenmiyor.

Çalışmada, çeşitli sosyal grupların bölge ile kurdukları ilişkiler internetteki basılı metinler ve haberler üzerinden incelenmiştir. Çalışmada tüm kaynaklar karşılaştırılmış ve dil analizleri, ifadeler ve ideolojik yaklaşımlar yapılmış ve farklı gruplar için Fener-Balat alanının anlamı tartışılmıştır. İnternette Fener-Balat bölgesi ile ilgili haberlerde üretilen hafızanın, gruplar tarafından ideolojik konularından oluşturduğu resimlerden oluştuğu görülmüştür. Basılı kaynaklarda ise bir tür popüler tarihin anı oluşturmaktan ziyade anlatıldığı görülmektedir.



## REFLECTIONS ON THE USE OF LESSON STUDY TO IMPROVE MATHEMATICS AND SCIENCE INSTRUCTION IN THE FREE STATE PROVINCE

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### Abstract

Mathematics and science competence is important for socioeconomic development, as a result, it is imperative for a country to measure and monitor the performance of its learners in these key subjects in order to assess the wealth of the educational system. Performance in mathematics and science is part of the human development strategy in South Africa. However, there is a growing concern with South Africa's performance in mathematics and science. Very few learners are graduating from school with high quality passes in both subjects in order to enter university. As evidenced in the Trends in International Mathematics and Science Study (TIMSS) 2015, South Africa is one of the lower performers of the 39 participating countries. Although South Africa is still one of the lower performing TIMSS countries, from 2003 to 2015 the country has shown the largest positive improvement of all participating countries in mathematics though the pace of this change is too slow. Therefore, plenty has been said and done to address this challenge. Various intervention strategies have been suggested, developed and implemented. Such interventions include among others, Japanese lesson study. Lesson study was initially developed in Japan in the beginning of the 20<sup>th</sup> century with the goal of continually improving the quality and effectiveness of the experiences that the teachers provide to their students. Using a qualitative case study design, this research attempts to address the question of how the conditions, the experiences and the outcomes of mathematics and science learning in schools can be changed using the case of the lesson study project that the researcher was involved in for a good five years. To collect the necessary data, the researcher had interview conversations with the mathematics and science teachers who participated in the lesson study project. The collected data was then transcribed, coded and categorised in themes. The participants signed the consent form to demonstrate their willingness to participate in the study. The findings of this research reveal that each stage of the lesson study cycle presents a slightly different set of opportunities for the professional development of mathematics and science teachers. The researcher concludes that more research on how teachers learn from teacher-led professional development is necessary.

Close

**RESPONSIVE OR ADAPTIVE EDUCATIONAL MOBILE WEBSITES: THE IMPACT OF DIFFERENT DESIGNS ON STUDENTS' PREFERENCES AT JOUF UNIVERSITY – SAUDI ARABIA**

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**Abstract**

The current research aimed to develop & compare between two different learning mobile websites designs, which are responsive versus adaptive. The best design amongst them is determined in terms of learners' preferences. To conduct this, the researcher formulated a preference level test (PLT) and installed it on both websites. 84 undergraduate students participated in the main experiment. They were divided into two experimental groups; each group consisted of 42 students. The first group used the responsive website (RW), while the second group used the adaptive website (AW). The results showed the superiority of the second group in the PLT with a statistically significant difference. The research recommended the necessity of raising awareness about the importance of mobile learning, as well as the adoption of effective designs, which enhancing the students' level of preference.

## SAUDI TEACHERS' PERCEPTIONS REGARDING ADOPTING DIGITAL GAMES IN TEACHING PRACTICE

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### **Abstract**

This study applied a qualitative approach to shed light on computer teachers' perception of video games and the barriers toward integrating these games into their teaching. The data were gathered through face-to-face interviews with 22 Saudi teachers from the Eastern Province of Saudi Arabia. The results show that teachers in Saudi schools hold a positive attitude toward adopting video games and they realize the importance of adopting new technologies; however, they do not use them for teaching purposes. As far as barriers to adopting video game are concerned, lack of facilitating conditions, low awareness of the potential for video games in learning, and the lack of video games that are suited to Saudi peculiarities and curricula are the most perceived barriers among teachers.

**SEMIOTIC EXPLANATION OF GENDER PERCEPTION CREATED BASED ON HOLLYWOOD  
ACTRESSES OF 1950-1970 PERIOD**

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**Abstract**

There is no doubt that the actresses in the camera frame were sculpted according to the perception of woman and the beauty of an eye looking behind the camera. There are certain visual and linguistic features that are imposed on a sexy actress, and she cannot get much out of it. Different meanings have been attributed to dark-haired actresses. The aim of this article is to examine being an actress in Hollywood between 1950 and 1970 in the light of semiotics.

**Keywords:** *Hollywood, semiotics, perception of women, sexy woman, modest women.*

## **SEMIOTIC EXPLANATION OF THE ROLES OF ACTRESSES IN THE POSTERS OF 1950-1980 TURKISH MOVIES IN CREATING GENDER PERCEPTION**

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### **Abstract**

The aim of this article is to investigate the role of visual and linguistic reflection forms of good family daughter, family woman and doomed backslider woman or vamp woman identities in the Turkish Cinema in the creation of gender perception.

## TECHNOLOGIES THAT SAVE LIVES IN THE MOUNTAINS - THE THING ABOUT MODERN SOLUTIONS AND EDUCATION OF THE SOCIETY

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### **Abstract**

There are many cases of deadly people in the mountains. The reasons for this phenomenon are diversification. Scientists, institutions as well as enterprises are looking for solutions that can change the presented state of affairs. One of the solutions is the use of various technologies enabling decision making during search and rescue operations carried out by the services and technologies supporting people traveling in the mountains. Fast and effective decision making is possible by obtaining reliable, reliable information and then its effective transmission. There is a certain difficulty in the border areas, because the location of missing persons is difficult. It is necessary to develop common procedures between countries, good practices and educate the public.

The article has been prepared on the basis of internal document analysis, as well as expert interviews (47 interviews) conducted with experts from the Polish Armed Forces, special units, Mountain Volunteer Rescue Service, Tatra Volunteer Ambulance Service, Police, Fire Brigade, psychologists. The purpose of the article is to identify modern technologies that save lives that are applicable in the mountains and to educate the public in this area.

## THE AFFORDANCE AND CHALLENGES OF IMPLEMENTING A MASSIVE OPEN ONLINE COURSE IN (KISWAHILI (KMOOC) IN EAST AFRICA

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### Abstract

MOOCs can be used to connect learners and initiate a sense of community online, which is an essential socio-cultural aspect of learning a language. The paper explores the opportunities afforded by the Massive Open Online Courses (MOOC) to support the offering of Kiswahili (*kMOOC*), for both local and international students, and the challenges associated with implementing it. The significant development of Kiswahili as a formal language beyond the geographical delineations of East African motivates explorations of novel ways to study the development and sustainability of this language. Research reported in this paper is part of a research programme exploring the value and utilisation of a Massive Open Online Course to support the learning and internationalisation of Kiswahili (*kMOOC*). *kMOOC* is a collaborative a research program at the State University of Zanzibar, Zanzibar and the University of Otago, New Zealand, prospectively looking into students' perspectives of the opportunities MOOCs offer in supporting the teaching and learning of Kiswahili language online. The paper seeks to identify opportunities afforded by *kMOOC* as a platform for reclaiming Kiswahili as a digital national heritage. *kMOOC* is viewed as an innovation to enhance global recognition of this growing language in East Africa and beyond, and the initiative could be utilised as a platform for the conservation of linguistic heritage.

## THE ASSESSMENT OF E-BOOK LEARNING WITH ACCEPTANCE LEVEL AND INFLUENCE OF TERTIARY STUDY IN TERTIARY EDUCATION

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### Abstract

In the 21<sup>st</sup> century, the internet is common for everyone. With advanced technology, people would like to take advantages from electronic world. In our daily life, many activities have launched electronic mode instead of traditional methods, e-commerce is one of the examples that replace the physical store style. Comparing with the earlier year, the environment of education has reformed a lot. There is a trend in which involving more electronic versions of learning materials. One of the changing tools is the e-book and it becomes more significant in tertiary education. More and more universities have encouraged students to adopt e-book in replacing traditional books. Moreover, the university campus is proactive to motivate students using the e-book. They have built the e-book system for students to search certain data and read the e-book materials. In order to find out the perception of students on using the e-book, this project conducts a survey which distributed to students who are receiving or received tertiary education. The questionnaires aim to observe the acceptance level of the e-book and the experience of using the e-book, also to discover on what extent e-book influence students' learning.

To examine the perception of students on using the e-book, some hypothesizes from the Technology Acceptance Model (TAM) and the Unified Theory of Acceptancy and Use Technology (UTAUT) have set to support the result. A new research model has been developed by combining some factors in TAM and UTAUT including the performance expectancy of the e-book, the effort expectancy of the e-book, the social influence of e-book, the facilitating conditions of e-book and behavioral intention. The four basic elements from UTAUT have been a critical influence of technology expectancy. Moreover, a new element has been added to evaluate the compatibility of e-book whether an acceptance tool for e-learning. The final part to prove the success of e-book in e-learning is the behavioral or usage intention of the e-book from TAM which is an important factor to support in this model. In this project, the final result would be to what extent that students in tertiary education recognize the e-book as part of their learning method. Also, to summarize all the collected data and information to give some suggestion on improving the e-book environment in higher education.



## THE EDUCATION FOR SECURITY: ETHICAL OR TECHNOLOGICAL PROBLEM?

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### Abstract

In the globalizing world, the security of individual people and the population depends more and more on the one hand on technological information transmission devices and the quality of devices protecting against natural and military threats. On the other hand, non-military threats, including cultural conflict, are becoming more and more serious. The so-called intercultural dialogue is a necessary way to alleviate cultural conflict, but it is not enough. The goal of intercultural dialogue should not be cultural unification, but the creation of a global community that preserves the diversity of local cultures. However, it is not enough to provide information in cyberspace in the implementation of this objective, but education is necessary, focused on both familiarity and respect for one's own culture as well as cultures of other populations. The basis of this education should be shaping the universalist ethics of interpersonal relationships, allowing to understand cultural otherness, as well as understanding and cooperation in spite of this otherness.

Ethics in the classical approach is a derivative of anthropology, that is, the most general assumptions about human being. The content of these assumptions influences the dominant culture in a given population. Thus, the problem of cultural dialogue ultimately boils down to the dialogue of people and populations in a different way of perceiving themselves and the so-called strangers. On the other hand, the ontical and cultural layer is the basis of personal security in the psychological and social as well as instrumental and defense layers.

Although the modern communication network in cyberspace serves to standardize cultural patterns, for peace on a global scale it is much more important to shape respect for otherness and coexistence of different cultures. The search for a universal basis, despite this diversity, may come from both the ancient culture of China, medieval Europe etc.

The next step in the unification of not only the cultural but also the psycho-physical equipment are the technological actions implementing the ideology of transhumanism. Undeniable achievements of new technologies should first of all serve the individual in updating his aspirations and abilities and communities in preserving their cultural identity, and not lead to commercialization of the degree of participation and domination of particular groups in the global community. All the more so the system of ethical values should control commercial goals.

The ever-faster variability and technologicalization of living conditions of each communities is conducive to justifying the thesis about the need to monitor the effects of this ethical norms changeability and to replace them with standardized norms and operating procedures. Such a conclusion, however, raises serious concerns about totalitarian goals and the emergence of new conflicts on a global scale between groups competing for the model of cultural unification and for access to global monitoring of the state of this unification.

**THE EFFECT AND RELATIONSHIP OF THE CHANGES IN THE PROCESS ON THE  
ARCHITECTURAL AND STRUCTURAL DESIGNS (SINGLE EXAMPLE)**

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**Abstract**

Nowaday, monumental and civil architecture works with many historical values are undergoing restoration, reinforcement and repair. Restoration-restoration practices carried out by public and private entrepreneurs include challenging processes. These applications are usually carried out by multi-disciplines. In both the project planning and application stage are seen contributions of professional occupations. The current state of the historical buildings, the demands of the users and the repair budgets require the necessity of joint work. Most of the unforeseeable situations in the project and official approval stage occur during the repair phase and lead to difficulties in managing the process. Therefore, it is important to preserve the authenticity of the structure in the design of structural (static) projects. Providing the user's current comfort conditions, building security and planning of densities above the utilization capacity of historical buildings also affect the restoration process. In order to preserve the original of historical buildings and to ensure their functions, multidisciplinary design process must be evaluated together. In this study; In Turkey, this type of repair work in the architectural profession, structural (static) projects, the common work and design of the academic fields and the challenges that these processes have brought to the architectural design environment have been addressed.

## THE IMPACT OF THE PHENOMENON OF IMMIGRATION IN POLAND ON CHANGES IN EDUCATION FOR SECURITY

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### Abstract

This article deals with the above problems by analyzing the Polish education system for safety, with the goal of answering the question whether it meets expectations in the situation of migration crisis and related pathologies. The issue forced the necessity to emphasize the problems of the education system for security in Poland, contemporary threats, with particular emphasis on illegal migration and its impact on the development of crime. Threats that people face require him to constantly learn about them and learn how to deal with them. Scientific exploration of problems points to the essence of people's awareness of the consequences of occurrence of threats. Currently, education for safety is carried out at school, through projects carried out by individual services and guards and the army, as well as through associations and non-governmental organizations. Undertakings for education for safety are many, but the system of education for security is not recognized, which will comprehensively cover all social groups of the Republic of Poland. The migration crisis initiated in 2015, initiated by conflicts in the Middle East, and further - the opening by Germany of the borders of the year for refugees fleeing warfare in September 2015, caused a massive inflow of migrants to various EU countries, in particular to affluent countries. This heightened the observed level of cultural diversity and clearly outlined social challenges not only for education. Migration is a threat that causes a number of other threats of a cultural, social, economic and criminal nature. The analysis of migration trends indicates a clear dynamism of this process in recent years. It can manifest, among others participation of migrants in organized criminal groups.

## THE THOUGHTS OF UNIVERSITY STUDENTS ABOUT PARTICIPATION OF THE EUROPEAN UNION AND THE BOLOGNA EDUCATION PROCESS

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### Abstract

The aim of this study is to determine and evaluate what university students think about the European Union and Bologna Education Process. The research includes 632 female and 608 male 1240 students in various faculties of the University of Ondokuz Mayıs University. The research was conducted in quantitative screening method. The data were obtained by a 5-point Likert-type scale developed by the researcher. At the end of the study, students' perspectives on European Union and Bologna Education Process were evaluated according to one-way analysis of variance, t-test, LSD test and percentage values according to the personal characteristics of the participants. According to the findings of the research, the positive opinions of the students were determined about participation in European Union and Bologna process. While there is no difference of opinion between the students according to their age and class, differences of opinion have been determined according to the faculties they study.

## THE USAGE OF E-LEARNING INSTRUCTIONAL TECHNOLOGIES IN HIGHER EDUCATION INSTITUTIONS IN THE UNITED ARAB EMIRATES (UAE)

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### Abstract

Higher education institutions in the UAE are increasingly incorporating e-learning programs into their curriculum. The large investment spent on these learning systems does not match the slow rate of adoption of e-learning among the faculty of these higher education institutions in the UAE. This autoethnographic study aimed to investigate and identify the factors that affect the adoption of e-learning systems among the faculty in higher education institutions in the UAE. The diffusion of innovation theory was used as a theoretical model and as a lens to guide this autoethnographic study. The purpose of this study was to identify the factors that positively affect the rate of adoption of Blackboard Learn among the faculty of the Computer Information Sciences and how the faculty measured that success. A qualitative autoethnographic research methodology was used and data was collected from personal reflections presented in my personal experiences and from my own recall of discussions with colleague. The findings revealed that the Computer Information Sciences faculty use the four variables of the diffusion of innovation theory to determine the rate of adoption of new e-learning initiatives and to measure their success. This study confirmed the importance of relative advantages, communication channels, time and social system in the diffusion of e-learning. It also revealed the need to increase the level of some attributes of these variables to increase the adoption rate of Blackboard Learn.

## THINKING DIFFERENCES BETWEEN SOCIAL AND SCIENCE DEPARTMENTS' STUDENTS ABOUT MATHEMATICS

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### Abstract

Educational politics in many industrial countries usually have a strong effect on science, engineering and mathematics. It has special meaning for the education of the scientific's area especially for mathematics teaching and learning. students' ideas are essential in their learning and problem solving of math. Many mathematics education researchers focus on this subject to make clearer and more powerful the learning and understanding of the course. In this study, the data was obtained from a science department (construction department) and a social department (business department) of a vocational school in Turkey. The quantitative data was analyzed using mean and independent sample t-test for this study. As a basic result of the study that all students' beliefs for math learning and problem solving had significant difference according to their departments

## UNIVERSITY WEBSITE EVALUATION: CASE STUDY OF RANGSIT UNIVERSITY, THAILAND

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### Abstract

Rangsit University, established in 1985, is one of the top private higher educational institutions in Thailand. At present, the University has offered 138 degree programs in 38 faculties/colleges. In the 2019 Webometrics Ranking of World Universities, Rangsit University ranked 24th among universities of Thailand, and the 2nd among Thai private universities. Webometrics was first published in 2004 and updated periodically twice a year in January and July. The main purpose of Webometrics is to support Open Access Initiatives to improve access to information on scientific research and scholarly materials published under the electronic form. With the signification of digital transformation, Rangsit University has taken seriously on applying the technology in the teaching-learning process as well as for the marketing outreach. Over the last few years, its faculties and colleges have developed their webpages in order to provide information and communication channel. The University website and faculty webpages become the 24/7 hours communication channel between the University and students, prospective students, parents and public. All websites/webpages have provided the available information of their faculties and colleges such as: academic programs, professor information, research and publications, and students activities, etc. Regarding to the important role of websites and webpages, the objective of this study is to evaluate and report the result for the continuous website development. The webpages of the 38 faculties/colleges of Rangsit University have been evaluated in six (6) components: accuracy, authority, objectivity, currency, coverage and appearance. The webpage evaluation indicator checklist form has been developed. The results of evaluation show that there are varieties in webpage development. Especially for the appearance or design component, regarding the units under the same parental institution, there are very different style in fonts, color, graphic user interface, and homepage presentation. According to accuracy component, the quantity and out- of-date information are very concerned. More than 50 percentages of linkages are broken. Therefore, the evaluation showed that most of webpages provide the needed and beneficial information for users and readers. The evaluation result indicates that the University shall take part in website development of its faculties and colleges. In addition, it can be useful for university as a good practice for website design and development.

## USING VIDEO-ANALYSIS OF MOTIONS IN PHYSICS TEACHING AND LEARNING

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### Abstract

This paper describes using video-analysis based tasks in the educational process of the students at the technical university. The attention is paid to university students and their knowledge of physics and conception/misconception.

The role of students in video analysis is to realize necessary physical characteristics, to choose a suitable way to a problem solution and from the relations among physical quantities to find a solution to a task. The tasks can be considered being the problem solving tasks with a well-defined problem and according to Bloom's taxonomy of cognitive domain they require higher level solution – mostly application, analysis and synthesis. On the other hand, it is also possible to demonstrate students, by a simple mathematical analysis, the use of integrals and derivatives in physics.

Using the method of video-analysis by interactive program Tracker the level of knowledge of students can be increased and some misconceptions can be eliminated.



## VIRTUAL LEARNING ENVIRONMENT IN VOCATIONAL SCHOOL MATHEMATICS LECTURES

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### **Abstract**

In mathematics, teacher usually use virtual learning environment (VLE) in their teaching at high school or university level lectures that they believe this kind of teaching can help students' understanding of math. In this experimental case study, we try to see the effect of VLE on vocational school students' mathematics. Virtual learning environment application was introduced in teaching mathematics lecture among forty-five students of a vocational school education. The data collection tools used in this study was the questionnaire, observation and interview. According to the results, students were more interactive by VLE as emotionally and educationally. Also, exams were efficient activity and lecture videos were most preferred materials for the students. Students' personal computers, internet connection and effective using of ICTs tools in lectures turned out to be main positive ways of VLE. We can say that math courses of vocational schools should be given adopting of VLE in an efficient and necessary way.

## **XELEDRING: INTELLIGENT TECHNOLOGY OF INTERACTIVITY AND INTERCONNECTION BETWEEN THE WORLD'S EDUCATION SYSTEMS**

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### **Abstract**

Our contribution consists in proposing smart technology “Xeledring” including a hardware and software components that addresses the current challenges of implementing inclusive education. “Xeledring” is a new smart technology of interactivity and interconnection between all educational systems and institutions of the world. Its vision is a better world educational system. Its staff consists of engineers, researchers, actors of the educational system, etc. and was awarded in 2018 an international patent of invention. We meet the needs of:

- Universities and institutes: creation of a framework for collaboration, partnership, interactivity and interconnection between institutions and universities, but also between the different actors of education whatever their geographical location and their language may be;
- Parents of students: to help and sensitize parents to play their full role in the development of education by providing them with tools at the cutting edge of digital and easy to use that will allow them to know for example the actions of his child at school, to be constantly in touch with the faculty and the administration, to have access to real-time notes, teacher comments and recommendations etc.
- international institutions and organizations: such as the World Bank, UNESCO, OECD, UNICEF, WHO, etc. who will no longer have to deal with the budgetary and logistical constraints of implementing large-scale international surveys such as PISA and the Global Student Health Survey in Schools
- decision-makers who can access reliable statistics to better direct public policies.

We answer it through the presentation of our prototype and that through the two components of 'Xeledring':

- Software: a multiplatform web and mobile application (android, IOS, windowsphone etc.) that has video calling, instant messaging, mailing and other technologies. Enabling a more inclusive education from a collaboration point of view and involvement of all actors through a relevant exchange flow.
- Hardware: consisting of Xeledring smartboard called 'Xelboard' capable of interconnecting all teaching institutions of the world with an instant translation system on any targeted language. The Xelboard through photoplethysmography has an ultramodern facial recognition system capable of detecting both physical and emotional signals for better support of the actors of the educational system.

This technology is accessible via connected objects (Smartphone, computers, ipads, etc.), in phase with the best in artificial intelligence and thus allows to capture massive, varied and targeted data corresponding to needs. In information (standardized data), but also and especially to model our objectives to better respond to their specificities. With a powerful algorithm combined with huge computing power, our technology has the ability to perceive and analyze large amounts of data from which a problem is to be solved, and the ability to process them to provide an effective solution. Xeledring makes it possible to automatically quantify any educational systems like the stock market index. We have set up a modular multiplatform interface that varies from user type to user depending on their access rights and guarantees the security and confidentiality of their personal data. Xeledring makes available to Xel-connected partners a flexible and extensible network of partners.

The Xelboard allows without any other prior installation:

- A flawless communication network, with a possibility of restriction or extension depending on the degree of responsibility or terms of the contract between the partner institutions
- Here the language barrier no longer exists thanks to our instant translation system more than effective
- A system for importing, scanning and archiving any type of document thanks to its LAD (Automatic Document Reading) and RAD (Automatic Document Recognition) technology
- Interconnexion of institutions through the xelboard and possibility to receive xelboard writings directly by all the

learners of the class and the partner classes at the same time on any type of Smartphone or computer for a better interactivity regardless of the distance . Thus, we make our contribution in the implementation of the problem that could be summarized in the following question: what role can technology play in the universities and institutes for a better and inclusive global education system?

The validation of our results will be more complete with production data from the next phase of the technology deployment test on a larger scale. These data will then be analyzed and confronted with the diagnosis of professionals in the sector: researchers, teachers, psychologists, doctors, sociologists, educationalists, etc.