



12TH



WORLD CONFERENCE ON EDUCATIONAL TECHNOLOGY RESEARCHES

12-14 MAY 2022
GRAND PARK LARA HOTEL CONVENTION CENTER
ANTALYA - TURKEY



ABSTRACTS BOOKS

WCETR-2022 PARTICIPANTS FLAGS



TAEGCENTER

TAEG_CENTER

TAEGCENTER

TAEG_CENTER

WWW.WCETR.ORG



**12th WORLD CONFERENCE ON EDUCATIONAL TECHNOLOGY RESEARCHES
(WCETR-2022)**

**ANTALYA
TURKEY**

12 - 14 MAY 2022

www.wcetr.org

ABSTRACTS BOOKS

Organization

The Academic Events Group

Organizing Committee

Organized by

[The Academic Events Group](#)

[Birlesik Dunya Yenilik Arastirma ve Yayıncılık Merkezi](#)

Program Chair

Prof. Dr. Hafize Keser

Program Committee

Ayşe Çakır İlhan, *Ankara University*, Turkey

Gilda Hoxha, *Mediterranean University of Albania*, Albania

Vedat Ozsoy, *TOBB University of Economics and Technology*, Turkey

Mehmet Karamanoglu, *Middlesex University*, UK

A. U. Muslimovna, *Kazakh National Pedagogical University named after Abay*, KZ

Anca Mitache, *University of Architecture and Urbanism "Ion Mincu"*, Romania

Incilay Yurdakul, *Hacettepe University*, Turkey

Ugurcan Akyüz, *Ayvansaray University*, Turkey

Vlladimir Radevski, *South East European University*, Macedonia

Organizing Committee

Dr. Tahir Tavukçu, *Cyprus Social Sciences University*

Dr. Nihat Ekizoglu, *Ataturk Teacher Training Academy*

Dr. Blerta Prevalla Etemi, *AAB University*

PhD Candidate Beria Gökaydın, *Near East University*, Cyprus

PhD Candidate Nesli Bahar Yavaş, *European University of Lefke*

PhD Candidate Semih Çalışkan, *Izmir Tınaztepe University*

PhD Candidate Zeynep Genç, *Istanbul Aydın University*

PhD Candidate Daniel Sekyere-Asiedu, *Near East University*

Msc. Mustafa Korucu, *Bahçeşehir Cyprus University*

Florijeta Hulaj, *AAB College*

Lilia Trushko, *Girne American University*

Metin Berk Odabası, *Warwick University*, UK

Secretariat

MA. Pembe Mehmet, *Florence Institute of Design International*, Florence, Italy

wcetr.info@gmail.com

International Advisory Board

Abdullah Kuzu, *Anadolu University*, Turkey
Adem Karahoca, *Bahcesehir University*, Turkey
Ahmet Mahirođlu, *Gazi University*, Turkey
Akbar Salehi, *Kharazmi University*, Iran
Ali Ekrem Özkul, *Anadolu University*, Turkey
Ana Loureiro, *Polytechnics Institute of Santarem*, Portugal
Antonella Carbonaro, *University of Bologna*, Italy
Arif Altun, *Hacettepe University*, Turkey
Aytekin İşman, *Sakarya University*, Turkey
Begoña Montero, *Universidad Politécnica de Valencia*, Spain
Buket Akkoyunlu, *Hacettepe University*, Turkey
Carmen Pérez-Sabater, *Universitat Politècnica de València*, Spain
Chee Ken Nee, *Universiti Pendidikan Sultan Idris*, Malaysia
Christine Harmes, *James Madison University*, USA
Colin Latchem, *Open Learning Consultant*, Australia
Deniz Deryakulu, *Ankara University*, Turkey
Eralp Altun, *Ege University*, Turkey
Fatos Adiloglu, *Bahcesehir University*, Turkey
Ferhan Odabaşı, *Anadolu University*, Turkey
George S. Mouzakitis, Greece
Gulsun Kurubacak, *Anadolu University*, Turkey
Hafize Keser, *Ankara University*, Turkey
Hakan Aydın, *Anadolu University*, Turkey
Halil İbrahim Yalın, *Gazi University*, Turkey
Hüseyin Uzunboylu, *Near East University*, North Cyprus
Jacobus G. Maree, *University Of Pretoria*, South Africa
Janet Parker, *Open University*, UK
Jean Underwood, *Nottingham Trent University*, UK
Jongho Shin, *Seoul National University*, South Korea
Kamisah Osman, *University of Kebangsaan*, Malaysia
Kinshuk, *Athabasca University*, Canada
Kiyoshi Nakabayashi, *Chiba Institute of Technology*, Japan
Mansour Abdi, *Arak University*, Iran
Marina S. Mcisaac, *Arizona State University*, USA
Mazzola Luca, Italy
Mehmet Erdem, *University of Las Vegas*, USA
Mehmet Gürol, *Firat University*, Turkey
Mehmet Kesim, *Anadolu University*, Turkey
Michael Spector, *University of Georgia*, USA
Mohammad H Yarmohammadian, *Isfahan University of Medical Sciences*, Iran
Murat Ataizi, *Anadolu University*, Turkey
Murat Barkan, *Yaşar University*, Turkey
Mustafa Murat İnceođlu, *Ege University*, Turkey
Nick Rusby, *British Journal of Educational Technology*, UK
Petek Aşkar, *Izmir Economics University*, Turkey

Peter Goodyear, *The University of Sydney*, Australia
Rauf Yıldız, *Çanakkale Onsekiz Mart University*, Turkey
Ray Webster, *Murdoch University*, Australia
Rozhan M. Idrus, *University Sains Malaysia*, Malaysia
Sadi Seferoğlu, *Hacettepe University*, Turkey
Salih Uşun, *Muğla University*, Turkey
Sarka Hoskova-Mayerova, *University of Defence*, Czech Republic
Selma Koc, *Cleveland State University*, USA
Servet Bayram, *Marmara University*, Turkey
Sonia Maria Suaeaz-Garaboa, *University of A Coruña*, Spain
Stephen W. Harmon, *Georgia State University*, USA
Steven M. Ross, *John Hopkins University*, USA
Thirusellvan Vandeyar, *University of Pretoria*, South Africa
Tom Baranowski, *Baylor College of Medicine*, USA
Tse-Kian Neo, *Multimedia University*, Malaysia
Uğur Demiray, *Anadolu University*, Turkey
Yavuz Akpınar, *Bogazici University*, Turkey
Yolanda Sealey-Ruiz, *Columbia University*, USA
Yu-chu Yeh, *National Chengchi University*, Taiwan
Yu-Mei Wang, *University of Alabama at Birmingham*, USA
Zehra Özçınar, *Ataturk Teacher Training Academy*, North Cyprus
Zeki Kaya, *Gazi University*, Turkey

KEYNOTES



Dr. Camino Bueno Alastuey
Public University of Navarra, Spain

Keynote Title: “Preservice teachers virtual exchange and the development of teacher digital competence”

Abstract: The development of key competences has become an important objective in education systems in Europe. One of those key competences is the digital competence, which became even more important with the closure of schools due to the pandemic of COVID-19. Nevertheless, the forced movement to online learning evidenced the fact the teachers were not sufficiently prepared to teach online as they felt an important lack of training in teacher digital competence in their university training programmes. In this conference, I will present the effect a virtual exchange aimed at improving the technological pedagogical and content knowledge (Mishra & Koehler, 2006) of pre-service bilingual teachers had in the development of their teacher digital competence.

The participants were four groups of pre-service foreign language teachers (two control and two experimental groups) from UPNA (Universidad Pública de Navarra) and CUCC (Universidad de Alcalá). Pre and post questionnaires were administered to the four groups to compare their pre- and their post teacher digital competence. Quantitative results showed improvements in the five areas of the competence in both the control and the experimental groups, but improvements were higher in the experimental groups and manifested the benefits a virtual exchange can bring to teacher training educational programs.

Bio: M.C. Bueno-Alastuey, PhD, is a Senior lecturer at the Public University of Navarre where she teaches English teaching methodology courses related to ICT for learning and teaching foreign languages to Education degree and Master students and English for Specific Purposes. Her research focuses on CALL, and factors affecting SLA. She has published nationally and internationally on these topics. <https://www.scopus.com/authid/detail.uri?authorId=55135963800>



Elena Alcalde Peñalver
University of Alcala

Keynote Title: "Enhancing critical thinking skills in an English for Specific Purposes class: new approaches and methodologies"

Abstract

In the English for Specific Purposes class, critical thinking skills play a very important part in language learning, since they are going to be intrinsically related to the different specialized topics that students will have to deal with in the classroom. Developing these skills in a way that makes them feel related to the topic is fundamental so as to motivate them and make them be willing to communicate. In this sense, audiovisual media can play a fundamental role and can be used for their development. Thus, in this presentation the results of a study in which students were encouraged to speak about a financial topic will be presented. To communicate, they had to watch an online documentary and use virtual tools. Results will show that activities of this kind can contribute dynamically and engagingly to the development of critical thinking skills while enhancing students' oral competency and the use of specialized terminology at the same time.

Bio: ELENA ALCALDE PEÑALVER holds a PhD on Translation from the University of Granada (Spain) and works as a lecturer and researcher at the University of Alcalá (Madrid). She has teaching and research experience at international level in the field of language learning and specialized translation.



Dr. Idoia Elola
Professor of Spanish & Applied Linguistics & Second Language Studies
Academic Director of Spanish program for the Texas Tech University Center in Seville
Department of Classical & Modern Languages & Literatures
Texas Tech University
Lubbock, TX 97409-2071
Email: idoia.elola@ttu.edu

Keynote Title: “L2 Composing in the Digital Era: digital storytelling at its best”

Abstract:

The L2 writing class is not merely the place where learners become aware, learn about, and practice writing conventions, but it is also the place where we, as researchers and educators, could and should provide students with access to the digital literacies they need to succeed in today’s world. L2 writing is not just a vehicle for language practice, but an empowering that shapes multiliterate and multilingual writers and communicators in a dynamic digital world. Due to the increase of digital tools, notions of the term L2 has expanded to include digital text construction, digital genres, authorship, ownership, collaboration, and audience in ways that fit new tools’ affordances and the times we live in.

This talk will be a guide to understand how digital tools influence communicative modes and written genres, encourage innovative multimodal forms of composing such and how feedback and assessment practices for L2 writing must adjust to reflect the changing processes and products of digital composing. Using digital storytelling as a genre, this talk will bring attention to factors that impact digital L2 writing in the 21st century as we continue our own digital multimodal journeys with and for our students and continue promoting our students’ learning in compelling, thoughtful and creative ways.



Blerta Prevala

Computer Science Faculty
AAB College, Republic of Kosovo

Title: “The Effects of Flipped Learning Approach on Students’ Perception and Achievement in Engineering Education“

Abstract:

Flipped learning as an educational strategy changes the traditional lecturing by flipping the classroom in the sense of listening the lectures at home and doing dynamic, group-based problem-solving activities in the classroom. This will engage the students in active learning, critical thinking and meliorates interpersonal skills.

The purpose of this study was to develop and implement flipped learning materials in the Introduction to Programming course and investigate the effect of flipped learning on student’s achievement and perceptions related to the flipped classroom. This study was conducted in the fall semester of 2018-2019 for 14 weeks at a university in the Republic of Kosovo. This study employed an explanatory mixed method research design. There were 87 students in the experimental group and 87 students in the control group. In the current study, the Achievement Test (AT) in the course Introduction to Programming with Java, Flipped Learning Technology Acceptance Model (FLTAM), Self-Directed Learning Readiness Scale (SDLR), Course Evaluation Questionnaire (CEQ) and the opinion of the students about pilot study of flipped classroom in engineering education were implemented to answer the research questions. The data collected through the achievement test, scales and student questionnaire were analyzed by using descriptive and inferential statistical analysis techniques. For the analysis of the data, SPSS 24.0 was used and alpha level was determined as .05. The data for qualitative analysis obtained from the interviews were analyzed by using both the content and descriptive analysis techniques.

The findings of the study indicated that students’ in the experimental group perform better according to all the instruments involved in this study as it can be seen in the following chapters.

Keywords – Flipped classroom, Engineering Education, Flipped learning, inverted classroom, engineering subjects..



Prof. Dr. Sahure Gonca TELLI
Doğuş University- Economics and Administra-
tive Faculty of Sciences-(Dean)

Keynote Title: “Digital Transformation”

Abstract: After the Industrial Revolution with the introduction of mass media into the life of mankind, the questions that he faced with the structures developed by digital technologies began to differ gradually. The fact that digitalization affects the present and future of humanity necessitates careful evaluation of this issue.

In today’s world, where the fiction of the world and the future is transferred to digital environments, digitalization has become almost indispensable for individuals, societies and businesses. If we accept management as an orchestration, it should be kept in mind that practices should consist of melody but good-sounding melodies. Because orchestral layout requires a good composition, the inclusion of all orchestral elements and the harmonization of sounds from different instruments. Based on this, it can be observed from our environment how tiny touches motivate institutions and individuals within the existing density.

The necessity of examining the Digital Transformation process on the academic side is obvious. We are also faced with changes in the management side. In this case, digital transformation differentiates both business and social life. In fact, we witness this sometimes consciously and sometimes unconsciously. It is also clear that universities should focus on such new issues.

Transformations such as the transformation of thousands of years of development stages into seconds at some points or reaching thousands of people with a single click, encountering different places or characters with applications such as virtual reality such as holograms throw us into digital realities with the taste of fairy tales or mythology. It introduces issues such as the fact that some of them are still at the point of scenarios and that the course of some of these scenarios should be designed by universities and researchers.

That’s why I find it very valuable in the academic community that issues such as how this digital transformation is, how it develops, what technologies it includes, how it is handled in sectors such as communication, business and engineering, in a way that will be evaluated from the window of opportunity in Turkey.



Prof. Dr. Servet Bayram
Dean, Faculty of Education
İstanbul Medipol Üniversitesi

Keynote Title: “Current Perspectives in Educational Technologies: Cyberpsychology, Neuroscience and Ethical Issues”

Abstract: Cyberspace is an extension of our individual and collective minds. How we react to the different educational environments within this space—be it computer game, social media, text messaging, e-mail, web, augmented reality or exotic virtual worlds,—depends on how that particular IT environment is constructed using the dimensions of Cyberpsychology and Neuroscience. Cyberpsychology and neuroscience use some useful transdisciplinary theories in analyzing the psychological impact of different digital learning environments, assessing an individual's digital lifestyle, investigating critical issues in learning and the using principles of general ethics. Future dimensions of IT, as it relates to dijital ethics, neuroscience, cyberpsychology, Education 5.0, training, and research intuitives are discussed.

Bio: Prof. Dr. Servet Bayram received his BS degree from Istanbul University, Department of Psychology in 1985. For a while, he worked with various groups of people who were treated in hospitals in the field of Clinical Psychology. After receiving the title of psychologist, he started to work as an Educational Psychologist at Boğaziçi University in 1988. He received his Master's degree in Guidance and Psychological Counseling at Boğaziçi University in 1991 and went to the United States for his PhD. He studied “Learning and Teaching Technologies” at the University of Pittsburgh and received his PhD in 1995. In his doctoral studies, he worked on "modeling of human mind and thought schemes with instructional design and computer software". After receiving a postdoctoral fellowship from Indiana University, he did Post-Doct studies on Electronic Performance Support and Information Systems. Here, he worked in fields such as Machine Learning, Artificial Intelligence, Human-Computer Interaction, Software Engineering and Usability between 1995-1997. Between

1997-1998, he served as a Lieutenant Psychologist - Instructor at the Istanbul Air Force Academy. Later, he started to work as a faculty member at Marmara University. He became Associate Professor in 2000 and Professor in 2006. He worked as the Head of the Department of Computer Education and Instructional Technologies at Marmara University for 15 years. During this period, he also carried out the Master's and Doctorate programs of the department. He carried out many academic-scientific studies in the fields of neuroscience, intelligence modeling and learning in the 'Human-Computer Interaction Laboratory' he founded in the department.

He started working at Yeditepe University in 2015. Here, he served as the Vice Rector, the Director of the Institute of Educational Sciences, the Head of the Computer-Instructional Technologies Education Department and the Head of the Information Technologies-Social Media Education Graduate Program. His work here has been on the adaptation of Artificial Intelligence, Industry 4.0 and Society 5.0 to human psychology, education and training.

Since 2021, he has been working as the Dean of the Faculty of Education at Istanbul Medipol University and the Head of the Educational Sciences (Guidance and Psychological Counseling) Department. He has given many courses at undergraduate / graduate level in different universities in Turkey and abroad. He takes part in Research Projects, international peer-reviewed journals and symposiums.

Research interests: The Effects of Human-Computer Interaction, Cyber Psychology, Cognitive-Learning Psychology (Attention, Perception, Motivation, Understanding and Intelligence), Psychological Testing, Neuroscience, Industry 4.0/5.0 and Education-Society 5.0 Approaches to the Digital Anthropocene (New Humanity) Age.



Prof. Dr. Bekim Fetaji

University “Mother Teresa”, North Macedonia

Keynote Title: “Will be announced”

Abstract: “Will be announced”

ABSTRACTS BOOKS

Development of Soft Skills while Learning Numerical Analysis

Marta Graciela Caligaris, Universidad Tecnológica Nacional

Georgina Beatriz Rodríguez, Universidad Tecnológica Nacional

Lorena Fernanda Laugero, Universidad Tecnológica Nacional

Abstract

Many authors argue that the acquisition of soft skills in any professional training is a factor that positively influences a future job success. This kind of skills allows people to interact properly with the surrounding environment. In addition to a solid scientific and technical training, engineering degree students need to develop capacities related to creativity and effective communication in different contexts, work in interdisciplinary teams, information management, among others. The learning and assessment of this type of skills must be a continuous process that should complement the training of the future engineer. Based on these ideas, in Numerical Analysis courses at the Facultad Regional San Nicolás, Universidad Tecnológica Nacional from Argentina, faculty designed didactic sequences trying to promote the development of communicative competences, both oral and written, during the learning of different numerical methods. Assessment instruments were also designed to analyze the degree of progress of those skills in students. The main objective of this paper is to show some of the didactic sequences designed to contribute to the training of students in terms of communicative competence and to present the rubrics that were developed, based on the evaluation criteria established.

ADDRESS FOR CORRESPONDENCE: Marta Graciela Caligaris, Universidad Tecnológica Nacional

E-Mail Address: mcaligaris@frsn.utn.edu.ar

Tools for Solving Systems of Nonlinear Equations

Marta Graciela Caligaris, Universidad Tecnológica Nacional

Georgina Beatriz Rodríguez, Universidad Tecnológica Nacional

Lorena Fernanda Laugero, Universidad Tecnológica Nacional

Abstract

Solving a system of nonlinear equations such as the one that arises from proposing the intersection of a line and a conic is an easy task, and is usually posed in Analytical Geometry courses in the first year of Engineering careers. However, the solution of some systems of nonlinear equations requires the application of numerical methods. When teaching numerical techniques in courses of Numerical Analysis of Engineering careers at the Facultad Regional San Nicolás, Universidad Tecnológica Nacional from Argentina, little emphasis is placed on the mechanical procedures of the methods. The development of other mathematics skills is pursued. Some math programs offer the ability to design custom graphical interfaces. Taking advantage of this possibility, the Engineering & Education Group (GIE, Grupo Ingeniería & Educación, in Spanish) has been developing, since 2008, a collection of personalized graphical interfaces related to the different topics of Numerical Analysis. The use of these apps in the classroom allows generating situations where students can appreciate the importance of applying different numerical methods and discuss different involved concepts. This paper presents the app designed and the sequence of activities that will be assigned in order to learn how to solve systems of nonlinear equations. Rubrics designed to analyze the degree of development of mathematical competencies that the students are expected to acquire after the proposed activities will also be shown.

ADDRESS FOR CORRESPONDENCE: Marta Graciela Caligaris, Universidad Tecnológica Nacional

E-Mail Address: mcaligaris@frsn.utn.edu.ar

Analysis of Studies in the Field of Educational Technologies Related to Covid-19 During the Pandemic Period in Turkey

Ezgi Pelin YILDIZ, Kafkas University

Abstract

The aim of this study is to make a descriptive analysis of the studies in the field of educational technologies discipline related to the Covid-19 disease during the pandemic period. The study was conducted with document analysis, one of the qualitative research methods. The articles examined in the study were obtained by scanning the databases of ULAKBİM, Google Scholar, Ebscohost Turkish education index, ASOS index and Sobiad index using the keywords Educational technologies and Covid-19. In this context, 96 articles made in the field of educational technologies related to Covid-19, which were determined by the purposeful sampling method, were identified and examined. These articles were published in the journal in which the studies were published using descriptive analysis, number of authors, research method, the data collection tools used in the research were examined under the titles such as the sample of the research, the method of determining the samples in the research, and the techniques used in the analysis of the data. As a result of the study, it was stated that it would be appropriate to conduct different studies with different stakeholders in the field of educational technologies regarding the Covid-19 pandemic process.

ADDRESS FOR CORRESPONDENCE: Ezgi Pelin YILDIZ, Kafkas University

E-Mail Address: yildizezqipelin@gmail.com

The Current Situation and Characteristics of the Language Ability of Hearing-Impaired Students in China

Siyi Guo, Tsukuba University

Abstract

The purpose of this study is to ascertain the current situation and characteristics of the language ability of hearing-impaired children in Chinese special education schools by comparing them with normal children in primary schools. Normal children and hearing-impaired children who were in grades 3 to 6 participated in this study. The Chinese language examinations were created by the Bureau of Education in Hebei Province, which were used in each school year to evaluate the language proficiency of all students in four areas of language: character recognition, vocabulary, grammar, and reading. The results showed that the scores of all the hearing-impaired children were lower than those of the normal children from grades 3 to 6. Moreover, the normal children showed development of language ability with rise of grade. However, the hearing-impaired children didn't show the same development with rise of grade. Although the language ability of the hearing-impaired children is lower than the normal children, their language level hasn't been determined. There is lack of valuable data to clarify the current situation of language ability for hearing-impaired children in Chinese special education schools. Therefore, it is necessary to ascertain the characteristics of language ability for hearing-impaired children in China by doing future research.

Key words: hearing-impaired children, language ability, current situation of language development, characteristics of language development

ADDRESS FOR CORRESPONDENCE: Siyi Guo, Tsukuba University

E-Mail Address: guosiyi19930209@yahoo.co.jp