



GLOBETS 2024

25-29 October 2024

CONFERENCE PROGRAM & ABSTRACT BOOK



From the President of the Conference,

Dear Esteemed Guests, Participants, and Friends of GLOBETS,

It is with great excitement and pride that we welcome you to GLOBETS 2024, where innovation, knowledge, and collaboration come together to shape the future of education, technology, and science. Each year, we gather brilliant minds and dedicated professionals to share, inspire, and advance our fields, and this year is no exception.

Behind the scenes, our team has worked tirelessly to create a conference program that is both stimulating and relevant to the challenges and opportunities we face today. Their passion and dedication are reflected in every detail, ensuring that GLOBETS continues to be a platform where high academic standards and warm, meaningful connections thrive.

As we embark on these few days together, we extend our deepest thanks to our distinguished keynote speakers, the GLOBETS committee, and all of you—our invaluable participants. Your contributions, whether through research, discussion, or simply being present, make this conference a success and a beacon of collaborative progress.

We hope this year's conference will leave you with new insights, lasting connections, and a renewed sense of purpose. Thank you for being a part of GLOBETS 2024, and we look forward to shaping the future together.

Warmest regards, Prof. Dr. Semra Mirici President of GLOBETS 2024

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Organization Committee

President

• Semra Mirici, Gazi University, Turkey

Organization Secretariat

- Nurşah Ataş- Hacettepe University, Turkey
- Nadire DAĞ Hacettepe University, Turkey

Scientific Committee

- Ahmet Şahbaz- Necmettin Erbakan University, Turkey
- Aleksandra Wach- Adam Mickiewicz University, Poland
- Alev Doğan- Gazi University, Turkey
- Ali Gül- Gazi University, Turkey
- Anna Matsyiak- Adam Mickiewicz University, Poland
- Annemie Desoete- Ghent University, Belgium
- Beril Akın- Gazi University, Turkey
- Bradley T. Erford- Vanderbilt University, USA
- Chi Cheung Ruby Yang- The Hong Kong Institute of Education, Hong Kong
- Dagmar El-Hmoudová- University of Hradec Kralove, Czech Republic
- Dolly Browner- Marikina University, Philippines
- Dusan Mitic- University of Belgrade, Serbia
- Duygu Sönmez, Hacettepe University, Turkey
- Eleonora Salvadori- Pavia University, Italy
- Enrica Piccardo- University of Toronto, Canada
- Fatma Arslan- Necmettin Erbakan University, Turkey
- Filomena Capucho- The Portuguese Catholic University, Portugal
- Fikret Karapınar- Necmettin Erbakan University, Turkey
- Gholam Hassan Khajavy- Ferdowsi University of Mashhad, Islamic Republic of Iran
- Hakan Sarı- Necmettin Erbakan University, Turkey

25-29 October 2024

- Hikmet Katırcıoğlu- Gazi University, Turkey
- Irena Vodopija-Krstanović- University of Rijeka, Croatia
- Ilze Ivanova- University of Latvia, Latvia
- Iveta Kovalcikova- Presov University, Slovakia
- Jessica Kimmel- San Antonio University, USA
- Jelena Vranješević- University of Belgrade, Serbia
- Ljilljana Markovic- University of Belgrade, Serbia
- Maria Titz Pedrajas- Marikina University, Philippines
- Martin Luxton- British English Board, UK
- Mehmet Birekul- Necmettin Erbakan University, Turkey
- Mehmet Yılmaz- Gazi University, Turkey
- Michael Kelly- Southamton University, UK
- Mustafa Yıldırım- Necmettin Erbakan University, Turkey
- Noorjehan Ganitar- Karnatak University, India
- Paul Prabhaker- Northern Illinois University, USA
- Philip Glover- Süleyman Demirel University, Turkey
- Rebecca Galeano- Florida State University, USA
- Samuel Bandy- Rockford University, USA
- Sedat Şensoy- Necmettin Erbakan University, Turkey
- Tahir Atıcı- Gazi University, Turkey
- Tonya Huber- Texas A&M International University, USA
- Yüksel Altun- Gazi University, Turkey





GLOBETS 2024: EDUCATION TECHNOLOGY, AND SCIENCE 25-29 October

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Temel Bilimler Eğitiminde Yapay Zekâ Entegrasyonu: Öğretmenin Değişen Rolü ve Eğitim Süreçlerinin Dönüşümü"



For information, visit our website: https://globets.net/





GLOBETS 2024: EDUCATION TECHNOLOGY, AND SCIENCE 25-29 October

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

"The Role of Artificial Intelligence in Measuring the Digital Transformation"



For information, visit our website: https://globets.net/



GLOBETS 2024 CONFERENCE PROGRAM

1 st Day: 25 th October 2024, Friday			
	NEZAHAT KELEŞOĞLU HALL		
Hours	Events		
10.00 - 10.20	Turkish Folk Music RecitalProf. Dr. Atilla Özdek AKEF Department of Music Education Necmettin Erbakan University		
	10.20-11.00 Opening Speeches	Prof. Dr. Cem Zorlu Necmettin Erbakan University Rector	
10.20-11.00		Prof. Dr. İsmail Hakkı Mirici Hacettepe University Conference President	
		John Silver Regional English Language Officer U.S. Mission to Türkiye	
11.00-11.30	RELO Presentation	Aycan Yaman RELO Specialist "Free Professional Development Opportunities from the Regional English Language Office"	
11.00-11.30	RELO Presentation	English Language Office" "The Regional English Language Office of the U.S. Embassy in Ankara will present information about a wide range of in-person and online professional development opportunities and materials for English teachers."	
11.30-11.40		SHORT BREAK	



11.40-12.00	Plenary Session #1	John Silver Regional English Language Officer U.S. Mission to Türkiye "Effective Teacher-to-Teacher Observation and Feedback Techniques" "Participants will learn how to provide effective and useful feedback to peer colleagues through eliciting methods."	
12.00-13.30	LUNCH		
13.30-14.30	Shannon Roach Workshop #1 University of Wisconsin–Eau Claire "Using the Socratic Seminar to Increase Student Engagement		
14.30-15.00	COFFEE BREAK		
15.00–16.00	Prof. Dr. Elena Antonova Ünlü Workshop #2 Hacettepe University "Statistical Analysis for EFL Research"		
16.00-17.00	Plenary Session #2	Prof. Dr. Ayfer Sayın Gazi University "The Role of Artificial Intelligence in Measuring the Digital Transformation"	
18.30	Opening Day Dinner at Necmettin Erbakan University		
CLOSING THE FIRST DAY			



2 nd Day: 26 th October 2024, Saturday			
Hours	Events		
Day 2 Session 1 <i>Chair:</i> Beril Salman AKIN	Presenters	Titles	
09.20-10.00	Plenary Session #3	Prof. Dr. Yüksel Altun Gazi University "Temel Bilimler Eğitiminde Yapay Zeka Entegrasyonu: Öğretmenin Değişen Rolü ve Eğitim Süreçlerinin Dönüşümü"	
10.00-10.20	Fazilet Seçil GÖK & Alev DOĞAN	Üstün Yetenekli Öğrencilerin Üretken Yapay Zeka Uygulamaların Kabul Durumumlarının Belirlenmesi	
10.20-10.40	Beril Salman AKIN	Education for Sustainable Development: An Evaluation of Educational Policies in Turkey	
10.40-11.00	Hikmet KATIRCIOĞLU & Miraç YILMAZ	Dijital/Teknolojik Öğrenme-Öğretme Araçları Açısından Biyoloji Öğretmen Adaylarının Profili	
11:00 - 11:30		COFFEE BREAK	
Day 2 Session 2 Chair: Duygu SÖNMEZ	Presenters	Titles	
11:30- 11:50	Fazilet Seçil GÖK & Alev DOĞAN	Üstün Yetenekli Öğrencilerin Akademik Yazma Süreçleri	
11:50- 12:10	Fernur DURAK & Hülya YILMAZ	5. Sınıf Öğrencilerinin Dijital Oyun Bağımlılık Düzeyleri ve Stem Tasarımlarının İncelenmesi: Bir Durum Çalışması	
12:10- 12:30	Yeşim ÇAĞLI	Öğretmen Adaylarının Konuşma Akıcılığını Sağlamada ve Heyecanlarını Baskılamalarında Doğru Nefes Kullanımının Etkisi	



12:30- 12:50	Gamze SİPER KABADAYI & Duygu SÖNMEZ	The Effect of Documentaries on Climate Change Awareness of 5th Grade Middle School Students
13:00- 14:00	LUNCH	
14:00	Visit to Panorama and Mevlana Museum	
19.00	Semah Ceremony	
CLOSING THE SECOND DAY		

3rd Day: 27 th October 2024, Sunday		
Hours Events		
11.00-14.00	Visit to Çatalhöyük	
14:00- 17:00 Visit to Science Museum and Butterfly Valley		
CLOSING THE THIRD DAY		

4 th Day: 28 th October 2024, Monday			
Hours	Events		
Day 4 Session 1 <i>Chair:</i> Sultan ÇIKRIK	Presenters Titles		
09.40-10.00	Edanur GÜNEY, Ülkü Hatice ÇAKIR & Sultan ÇIKRIK	Investigation of Pre-Service Teachers' Awareness of Astrobiology Topics	
10.00- 10.20	Nazlı Hilal KORKMAZ & Miraç YILMAZ	Gerçek ve Sanal Laboratuvar Kullanımına İlişkin Biyoloji Öğretmen Adayı Görüşleri	
10.20-10.40	Fatma KİMSESİZ	EFL Learners' Perceptions on Reading Classic English Stories: Effects on Vocabulary, Reading Comprehension and Motivation	



25-29 October 2024

10.40-11.00	Hakan SARI & Burcu YAPAR ÖZ	Türkiye'de Özel Eğitim Anabilim Dallarında Yürütülen Dil Öğretimi ile İlgili Lisans Derslerinin Kazanım ve İçerik Yönünden İncelenmesi	
11:00 - 11:30		COFFEE BREAK	
Day 4 Session 2 Chair: Ferdi BAYRAK	Presenters	Titles	
11:30- 11:50	Ferdi BAYRAK	Fen Bilimleri Dersi Eğitiminin Oyunlaştırılmış E-Öğrenme Ortamlarıyla Desteklenmesinin Motivasyon Ve Başarıya Etkisi	
11:50- 12:10	Elif ŞAHANBAZ & Miraç YILMAZ	Biyoloji Eğitiminde Sanal Laboratuvar Kullanımına İlişkin Öğretmen Adayı Görüşleri	
12:10- 12:30	Dilara KARACA, Duygu ÜLGER & Sultan ÇIKRIK	Analysis of Secondary Biology Textbooks in Terms of Acronyms and Eponyms	
12:30- 12:50	Güler AKİS & Kaan BATI	Literature Review on the Effect of Problem-Based Learning on Students' Academic Achievement, Motivation and Attitude	
13:00- 14:00		LUNCH	
Day 4 Session 3 <i>Chair:</i> Hatice Begüm UYANIK	Presenters	Titles	
14:00- 14.20	Eda KÜÇÜKARABACI & Tunay TAŞ	Prioritisation of Sustainable Development Goals by Turkish Prospective Teachers of English	
14.20-14.40	Abide TUNCER & Ayça ASLAN	Pre-service ELT Teachers' Engagement with Sustainable Development Goals Through Recycled Materials	
14.40-15.00	Hakan SARI & Hatice Begüm UYANIK	Language Improvement Of Children With Autism Spectrum Condition After Starting Inclusive Education: From The Parent's Perspectives	
15.20-15.40	Berke YILDIRIM & Fatih Cemal TEKİN	Health and medical informatics education: outlook via bibliometrics for the upcoming decade in Emergency Departments	



15.40-16.00	COFFEE BREAK	
Day 4 Session 4 <i>Chair:</i> Duygu SÖNMEZ	Presenters	Titles
16.00-16.20	Ufuk KELEŞ & Maysa Abed Muhammed & Özkan KIRMIZI	Making Sense of an English Language Teacher's Identity Tensions as an International Graduate Student in Türkiye
16.20-16.40	Gökçe DEMİRYÜREK	Looking into a Mirror Held Up to Jarring Reality: The Deep Imprints of Poverty in Children's Poetry
16.40-17.00	Şeyma ULUKÖK YILDIRIM & Duygu SÖNMEZ	Reviewing Game-Based Learning Research in Science Education with Bibliometric Analysis
CLOSING THE FOURTH DAY		

5 th Day: 29 th October 2024, Tuesday		
Hours Events		Events
Day 5 Session 1 Chair: Raziye UĞURLU	Presenters	Titles
09.40-10.00	Hakan SARI & Raziye UĞURLU	Sınıfında Kaynaştırma Öğrencisi Olan Yabancı Dil Öğretmenlerinin Öğretim Süreçlerinde Kullandıkları Öğretim Yöntem ve Teknikleri İle İlgili Görüşlerinin İncelenmesi: Nitel Yaklaşım
10.00- 10.20	Hakan SARI & Hikmet Beyza YAKICI	Dil ve Konuşma Güçlüğüne Sahip Öğrencilere Yabancı Dil Öğrenme Süreçlerinde Karşılaştıkları Güçlüklerin Öğretmen Görüşleri Açısından İncelenmesi
10.20-10.40	Berfin YAMAÇ	Navigating Challenges In Immigrant Education: Syrian Refugee Students' Classroom Dynamics, Teacher And Parent Perspectives, And Coping Strategies
10.40-11.00	Hakan SARI & Emine Beste AKSOY	Özel Öğrenme Güçlüğü Olan Öğrencilerin Okuma-Yazma Öğrenme Sürecinde Karşılaştıkları Yürütücü İşlevlere ilişkin

25-29 October 2024

		Zorlukların Öğretmen Görüşleri Açısından İncelenmesi
11:00 - 11:30		COFFEE BREAK
Day 5 Session 2 Chair: Semra MİRİCİ	Presenters	Titles
11:30- 11:50	Merve ÖZDEMİR & Semra MİRİCİ	Biotechnology Education: Needs Analysis For In-Service Training Programs for Teachers
11:50- 12:10	Semra MİRİCİ, Aycan KİBAR ERDOĞAN	Biology Preservice Teachers' Views on Virtual Laboratory Applications
12.10 - 12.30	Müge Ezgi AYYILDIZ, Pelin DEMİR, Nazlı Gökben ATILBOZ	The Use of Augmented Reality in the Teaching of the Water Cycle
12:30- 12:50	Songül YURTDAŞ, Özgül SU ÖZENİR, Hikmet SÜRMELİ	Taxonomy Applications in Coastal Ecosystems: Scientific Results and Evaluation of Project-Based Learning Method
13:00- 14:00	LUNCH	
Day 5 Session 3 <i>Chair:</i> Ümmü Saliha EKEN İNAN	Presenters	Titles
14:00- 14:20	Burak Karataşoğlu & Tuğçe Nur Şimşir	Türkiye'deki Beslenme Eğitimi
14:20- 14:40	Esen Sucuoğlu & Nesrin M. Bahçelerli	The Role of Experiential Learning in Developing Students' Attitudes towards Sustainability in Tourism Education
14:40- 15:00	Esra ULUKÖK	Reverse Mentoring: A content analysis
15.00- 15.20	Haruna ABUBAKAR & Suleiman BALARABE & Hasnah Binti Mohamed	Teacher-Trainees Awareness and Perception of YouTube as a Teaching Resource in Colleges of Education in Nigeria



15.20- 15.40	Haruna ABUBAKAR & Hasnah Binti Mohamed	Microteaching Structural Equation Modelling on the Influence of YouTube Video Technology on Teacher Trainees' Academic Performance
15.40- 16.00	Ümmü Saliha EKEN İNAN	Bibliometric Analysis of Education Marketing
CLOSING THE CONFERENCE		



ABSTRACTS



PLENARY SESSION SPEAKER

Integration of Artificial Intelligence in Basic Science Education: The Changing Role of Teachers and the Transformation of Educational Processes



Prof. Dr. Yüksel ALTUN

Prof. Dr. Yüksel Altun is a faculty member at Gazi University, Gazi Faculty of Education, in the Department of Chemistry Education. He specializes in Analytical Chemistry and Chemistry Education. His expertise in analytical chemistry includes techniques such as potentiometry, voltammetry, and HPLC, while in chemistry education, his focus spans artificial intelligence, the nature of science, teacher issues, and computer-assisted instructional practices. He has published numerous national and international research articles, projects, books, and book chapters in these fields. Recently, he has concentrated on integrating artificial intelligence applications into chemistry teaching. For more information on his publications and work, please visit https://avesis.gazi.edu.tr/yukseloz





The Role of Artificial Intelligence in Measuring the Digital Transformation

Prof. Dr. Ayfer SAYIN

Prof. Dr. Ayfer Sayın completed her undergraduate studies in Turkish Language and Literature Education at Gazi University's Faculty of Education in 2008, graduating with high honors. She earned her master's degree in Educational Measurement and Evaluation from Hacettepe University in 2010 and her Ph.D. in the same field in 2014. She was awarded the title of Associate Professor in 2019 and became a Full Professor in 2024. Prof. Dr. Ayfer Sayin currently serves as a professor in the Department of Educational Measurement and Evaluation at the Faculty of Gazi Education. Additionally, she holds administrative roles as the Assistant Coordinator of Accreditation and the Assistant Coordinator of the Measurement and Evaluation Unit at the Gazi Education Faculty. In 2022-2023, Prof. Dr. Sayın was a visiting professor and researcher at the University of Alberta in Canada, supported by the TÜBİTAK 2219 Postdoctoral Research Program. Her research focuses on the digitalization of assessment, artificial intelligence, automated evaluation, measurement of language skills, measurement of higher-order thinking skills, and multivariate statistics. Prof. Dr. Sayın has made significant contributions to these fields in both national and international research. She also provides academic consultancy to various public and private institutions and actively contributes to numerous national and international projects and conferences.

Abstract

Artificial Intelligence (AI) is at the forefront of digital transformation, reshaping how we approach various fields, including education. In the realm of assessment and evaluation, AI is not only enhancing efficiency but also redefining traditional methods.



By leveraging machine learning, neural networks, and deep learning, AI enables the automatic generation of test items, automated scoring of assessments, and real-time feedback, all while addressing ethical considerations. This session will explore how AI is being integrated into educational assessment, offering a glimpse into the future where technology and education intersect to create more personalized, fair, and effective evaluation systems.

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Determining Gifted Students' Acceptance of Productive Artificial Intelligence Applications

Fazilet Seçil GÖK

Alev DOĞAN

Abstract

Productive AI, which is rapidly gaining ground in education, is a type of AI that can produce new and original content using large data sets and deep learning models. Generative AI applications provide students with new and effective tools in their learning process, enabling personalization and diversification of learning. However, the effective use of these applications in education depends on the level of acceptance and adoption of these technologies by students. Therefore, the aim of this study was to determine the acceptance of productive artificial intelligence applications by gifted students, who generally seek a learning experience beyond standard educational programmes. To this end, the study was conducted with 26 volunteer gifted students between the ages of 10 and 13 who were studying at a science and arts center in the Cankaya district of Ankara province. The participants were selected using a purposive sampling method. The Productive Artificial Intelligence Acceptance Scale developed by Karaoğlan Yılmaz, Yılmaz, and Ceylan (2023) was used as a data collection tool. The scale is a 20-item scale based on the Unified Technology Acceptance and Use Theory model and was developed to measure students' attitudes towards four factors: performance expectation, effort expectation, social influence, and facilitating conditions. The validity and reliability studies of the scale were previously conducted and the Cronbach's alpha coefficient was determined to be 0.97 and the test-retest reliability was determined to be 0.95. The data collection process was carried out during the academic year 2023-2024. The Generative AI Acceptance Scale was administered to the students online and each student independently completed this scale, which took approximately 15 minutes to complete. The confidentiality of the data was protected and participants were informed that the results would be reported anonymously. The data obtained were analyzed using percentage frequency analysis, and the frequency and percentage values of each factor making up the scale were interpreted. According to the results, 31.88% of the students scored high in the Performance Expectancy sub-dimension, 31.56% in the Effort Expectancy dimension, 24.33% in the Facilitating Effect dimension and only 13.84% in the Social Effect dimension. In this case, it can be said that the acceptance levels of gifted students are higher in the performance effect, effort expectancy and facilitative effect dimensions, while their acceptance levels are lower in the social effect dimension. Productive applications of artificial intelligence have the potential to revolutionize individual learning processes. However, the successful implementation of these technologies in education depends on the acceptance and effective use of these technologies by individuals. Therefore, it is important to improve individuals' perceptions and attitudes towards productive artificial intelligence applications.

Keywords: Generative Artificial Intelligence, Gifted students, Acceptance status

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Education for Sustainable Development: An Evaluation of Educational Policies in Turkey

Beril Salman AKIN

Abstract

Sustainable development is an approach that aims to meet current needs without compromising the ability of future generations to meet their own needs. This approach is essential due to human activities that lead to environmental degradation, depletion of natural resources, and increasing social and economic inequalities. Education plays a crucial role in raising awareness about sustainability and is seen as an important tool for achieving sustainable development, as outlined in the United Nations' Sustainable Development Goals (SDGs). The process that began with the 1972 Stockholm Conference continued with the 1992 Rio Summit and gained global momentum during the United Nations Decade of Education for Sustainable Development (2005-2014). During this period, education increased environmental awareness and expanded to include social justice and economic sustainability. In recent years, significant progress has been made in Turkey's sustainable development of education. With curriculum reforms introduced by the Ministry of National Education (MEB) in 2018 and 2024, topics related to sustainability, such as environmental awareness, recycling, energy efficiency, and climate change, are integrated into various subjects from primary to secondary education. While these themes are incorporated into subjects like Science, Social Studies, and Geography, non-governmental organizations (NGOs) are also working to raise awareness through educational projects and workshops in this field. Examining how Turkey's educational policies align with the goals of sustainable development is important for understanding both the effectiveness of the reforms implemented within the country and how close they are to international standards. This research evaluates how education for sustainable development (ESD) is aligned with Turkey's current educational policies, explores which methodologies can rapidly expand this education in the short term, and discusses the improvements needed for the future. The study offers a comparative analysis by evaluating whether Turkey's educational policies are in line with the sustainable development goals and compares these with international practices. Turkey places greater emphasis on education for sustainable development, particularly in line with international commitments such as the Paris Climate Agreement. The evaluations conducted within the scope of this study reveal that certain challenges persist in sustainable development education in Turkey. Specifically, the lack of resources and technological infrastructure in rural schools and the need for widespread teacher training are highlighted as issues that require solutions. Furthermore, it is necessary to raise awareness about sustainability not only among students but also among parents and the wider public. Due to these



shortcomings, the more effective use of digital education platforms in the short term presents a significant opportunity for reaching larger audiences in Turkey.

Keywords: Education for Sustainable Development (ESD), Educational Policies, Environmental Education, Educational Reform, Digital Education



Profile of Biology Teacher Candidates in Terms of Digital/Technological Learning-Teaching Tools

Hikmet KATIRCIOĞLU

Miraç YILMAZ

Abstract

Digital technologies, which have become one of the main tools used for educational activities, are important for science because they provide concretization and learning by experience. The current status of biology teacher candidates should be examined first regarding digital technologies, which should also be evaluated in detail for biology education. The aim of this research is to examine the profile of biology teacher candidates in terms of learning and teaching tools of digital/technologies. The sample of the research conducted with the quantitative survey method consists of 61 biology teacher candidates from the education faculties of two state universities in Ankara. The frequency and percentage distributions of the data obtained in the research, in which a questionnaire including personal information and questions about digital/technological tools was used, were calculated. According to the results, 87% of biology teacher candidates did not receive any training on digital technologies except for compulsory courses; the activities they participated in the most were TUBITAK Project (43%), Science Museum Tour (39%) and Digital Library/Index Usage (33%). However, 21% of teacher candidates did not participate in any digital/technological activities. The digital/technological education-training platforms that teacher candidates have the most knowledge about are Education Information Network (92%) and Secondary Education General Directorate Material (84%). In addition, although the most frequent purposes of using digital/technological applications are making presentations (93%). video editing (89%), image editing (74%), video/image sharing (74%), and playing games (71%); important education-training applications such as preparing animations (30%) and using simulations (15%) are used very rarely. According to these results, it can be suggested that pre-service digital/technological education be improved by giving more space to digital technology education in biology teacher training programs.

Keywords: biology education, digital technologies, learning, teaching, teacher candidate.



Gifted Students' Academic Writing Processes

Fazilet Seçil GÖK

Alev DOĞAN

Abstract

Academic writing can be defined as the expression of information and ideas in a structured, logical and accurate manner and requires the ability to research, analyze and think critically about a subject and to present this information in an organized way. Gifted students are individuals with high academic, creative or leadership potential compared to their peers. Academic writing enables students to express their thoughts effectively and to share their knowledge and ideas. For this reason, this study conducted a one-group quasi-experimental research with 24 volunteer participants of gifted students studying in a Science and Arts Centre in Cankaya district of Ankara province to improve their academic writing skills. The research was planned in three stages, and in the first stage, training including "writing in academic language and its features, literature review, citation and bibliography according to ethical principles, determining the problem situation and appropriate method, writing scientific papers in academic text structure" was applied. In the second stage, academic writing exercises were carried out with the students. The third stage was planned as the presentation of the scientific studies prepared by the students at national conferences. The data of the study were collected with a semi-structured interview form, which was applied to the participants before and after the application. The data were analyzed using content analysis. At the end of the implementation process, 17 out of 24 students presented their studies at national scientific congresses and 3 students prepared their studies for a future national congress. 4 students could not complete their scientific studies because they could not attend the courses continuously. When the data obtained were evaluated, it was found that academic writing education and practices with gifted students contributed positively to the students' academic writing skills. Therefore, conducting studies that support the academic writing skills of gifted students and encouraging students in this area is crucial for them to fully realize their potential and contribute to the scientific world.

Keywords: Gifted students, academic writing, academic text

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

An Investigation of 5th Grade Students' Digital Game Addiction Levels and STEM Designs: A Case Study

Fernur DURAK

Hülya YILMAZ

Abstract

Today, the real world can be modeled within digital games. Children can work individually or in groups to create designs in these games. Science, mathematics, and engineering skills, which may not be easily tested or experienced in daily life, can be reinforced through digital games. This study aims to examine the effects of students' digital game addiction levels, the types of digital games they play, and the amount of time they spend playing these games on the solutions they find to a problem posed after STEM education. First, the Information Form and the Digital Game Addiction Scale for Children were administered to 5th-grade students, followed by a 10-week STEM education program. In the final week of the education, the relationship between their solutions to the problem presented in the STEM Drawing Form and their digital game addiction levels and the types of digital games they play was examined. The holistic multiple-case design, one of the qualitative research methods, was utilized in the study. The data obtained from the STEM Drawing Form were analyzed using descriptive analysis, and the drawings were examined in detail to create themes. To deepen the data, semi-structured interviews were conducted with six volunteer students of different addiction levels-"Normal," "At Risk," and "Highly Addicted"-and their designs were analyzed in depth. The study found that as students' levels of digital game addiction increased, their problem-solving approaches became more creative and diverse, with a greater tendency to transfer elements they saw in the digital world to the real world. However, with the increase in addiction levels, students paid less attention to the feasibility of their designs and tended to ignore the differences in natural laws between the real and virtual worlds.

Keywords: Digital game addiction, Engineering design process, Normal group, At-risk group, STEM, Highly at-risk group.

This study was conducted as part of the first author's master's thesis under the supervision of the second author at Ege University Institute of Educational Sciences.



in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

The Impact of Proper Breathing Techniques on Pre-service Teachers' Speaking Fluency and Managing Speech Anxiety

Yeşim ÇAĞLI

Abstract

It is a well-known way for every teacher to effectively explain to his students with the gestures and facial expressions he uses in his classroom like a stage. In this regard, in order for the teacher's speech to be fluent and use the correct pronunciation, the breath taken should be in the right technique; that is, it is necessary to use diaphragm breathing. In order to be able to use this correct technique, it would be a correct approach to give breathing techniques to the teacher candidates, just like voice artists or speakers. In this study, the teacher candidates who voluntarily participated in the study were taught diaphragmatic breathing techniques, and they were given lectures before and after the study. In addition, in order to strengthen the lip movements, wheeling exercises were done and it was aimed to strengthen the classroom management with lectures. In our study, studies were carried out with 8 prospective teachers who were studying at the Department of Biology Teaching at Gazi University and were selected on a voluntary basis. The study is a qualitative study, and it is completed with a special case study from qualitative study methods. Each candidate teacher was asked to indicate the changes they noticed in themselves as a result of working with their own handwriting. As a result of the study, it was concluded that correct breathing affects the amount of oxygen entering the body, and this physiological effect affects the autonomic system, thus suppressing the moments of excitement and thus contributing to the expression of the subject, class control and dictions.

Keywords: Excitement, diaphragmatic breathing, speech, education.



The Effect of Documentaries on Climate Change Awareness of 5th Grade Middle School Students

Gamze SİPER KABADAYI

Duygu SÖNMEZ

Abstract

Documentaries that provide individuals with visual and auditory experiences about environmental issues that urgently need attention today have the potential to reach and influence a wide audience. Because documentaries contain real events and facts. The aim of the study, which was set out with this idea, is to determine the perspectives of fifth grade students on climate change and to examine the effect of the use of documentaries on students' climate change awareness in this process. In the research, which was created with an experimental design with experimental and control groups, the same activities were carried out in the experimental and control groups within the scope of the "Human and Environment" unit of the 5th grade science course, and the course process was processed in the same way. In the study, which was created with an experimental design with experimental and control groups, the same activities were carried out in the experimental and control groups within the scope of the "Human and Environment" unit of the 5th grade science course, and the course process was processed in the same way. However, the experimental group was shown the documentary "Breaking Boundaries: The Science of Our Planet" and given an activity sheet for the documentary. 36 students were included in the experimental group and 34 students were included in the control group. The quantitative data of the study were provided by the Global Warming Awareness scale, and the qualitative data were provided by the students' activity sheets and semi-structured interviews. As a result of the application, the "Human and Environment" unit, which was taught with 5th grade students, significantly increased the averages of both the experimental and control groups. Although the documentary intervention did not create a significant difference between the two groups, it increased the mean of the experimental group, which had lower pre-test scores, and caused the students to feel sad about environmental problems but hopeful that it was not too late. At the same time, the students developed deeper perspectives after the documentary intervention and felt that they were a part of nature and the environment.



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Investigation of Pre-Service Teachers' Awareness of Astrobiology Topics

Edanur GÜNEY

Ülkü Hatice ÇAKIR

Sultan ÇIKRIK

Abstract

Astrobiology is a multidisciplinary and interdisciplinary science investigating the emergence of life in the universe and the future of life. Astrobiology tries to explain life in the universe by utilizing many branches and sub-branches of science such as biology, physics, chemistry, geology, and astronomy. This multifaceted structure of astrobiology makes it difficult to both understand and study. This study aims to examine pre-service teachers' awareness of astrobiology topics. The research was conducted in the 2023-2024 academic year. The study group of the research consisted of pre-service teachers studying in the departments of biology, geography, science, physics, and chemistry education at the faculty of education of a university. In the study, which was designed according to qualitative research design, a form asking for demographic information and a semi-structured interview form developed by the researchers were used as data collection tools. In the data analysis process, the answers given by the pre-service teachers were analyzed with the NVivo 12 Plus program, codes were created from similar expression groups, and the frequency of repetition under themes was tabulated by giving frequency (f) and percentage (%) values. According to the results of the study, it was seen that pre-service teachers did not have sufficient knowledge about astrobiology and had difficulty in explaining the conditions necessary for the emergence of life.

Keywords: Astrobiology, Pre-service teacher, Astronomy, Life, Universe.



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Pre-service Biology Teachers' Perspectives on the Use of Physical and Virtual Laboratories

Nazlı Hilal KORKMAZ

Miraç YILMAZ

Abstract

It is unthinkable that biology education, which enables learning by trying, researching and doing, should be away from experimental environments. However, the more effective use of biology experiments that can be carried out in laboratory and field environments and their integration with developing digital technologies such as virtual laboratories are still a matter of curiosity in terms of biology education. Therefore, it is important to determine and develop the pre-service opinions of biology teacher candidates in order to increase the understanding of the effective use of live (real) experiments/laboratories and awareness of virtual laboratories. The purpose of this research is to examine the opinions of prospective biology teachers regarding the use of live (real) experiments/laboratories and virtual laboratories. The study group of the research, which was conducted with the qualitative case study method, consists of 54 prospective biology teachers studying at the education faculties of two state universities in Ankara. The data obtained using a structured interview survey in the study was subjected to content analysis and the reliability value was found to be 87%. According to the results, biology teacher candidates' opinions on the contributions of live (real) experiments/laboratories to biology lessons are categorized into the following themes: "Contribution to Learning (3 codes, 42%)", "Contribution to Experiences and Skills (3 codes, 26%)", "Contribution to Affective Traits and Values (3 codes, 16%)", and "Contribution to Teaching (2 codes, 16%)". The focus is primarily on contributions to learning and skills. According to the results, the opinions of prospective biology teachers regarding their preferences for the use of virtual and live (real) experiments/laboratories were collected in the following themes: "Depends on Opportunities and Conditions (6 Codes, 58%)", "Depends on Learning and Teaching Situations (3 Codes, 32%)" and "Depends on Personal Laboratory Preference (2 Codes, 10%)". The focus is primarily on the choice of use based on amenities and conditions.

Keywords: experiment, real laboratory, virtual laboratory, biology education, pre-service teachers.



EFL Learners' Perceptions on Reading Classic English Stories: Effects on Vocabulary, Reading Comprehension and Motivation

Fatma KİMSESİZ

Abstract

This study explores the perceptions of English as a Foreign Language (EFL) learners regarding the impact of reading classic English stories on enhancing vocabulary learning, reading comprehension and motivation. The study was conducted in preparatory English classrooms at a public university in Turkey. During the study, 42 A2 level EFL learners from three distinct classes voluntarily participated in the study. The participants had 5-weeks of focused reading sessions based on five different classic English stories in their Reading courses. A questionnaire with 40 items was administered to collect learners' opinions on how these stories influenced their vocabulary acquisition, reading comprehension, and motivation. The collected data were analyzed using SPSS for the descriptive analysis. The results indicated that the learners found reading comprehension, and increasing their motivation in learning English. The study also offers pedagogical implications of incorporating classic literature into EFL curricula to support language development.

Keywords: classic stories; EFL; reading comprehension; reading motivation; vocabulary



An Examination of Language Teaching Courses Conducted in Special Education Departments in Turkey in Terms of Learning Outcomes and Content

Hakan Sarı

Burcu YAPAR ÖZ

Abstract

Language, as the cornerstone of communication, plays a significant role in individuals' interactions. Through language, people can convey their emotions and thoughts to others and participate in the process of understanding and interpreting the world. While language is crucial for every individual, it becomes even more critical for individuals with special needs. These individuals face difficulties in various areas and require special education and support. Being able to use language effectively helps them lead independent daily lives, express their needs, and establish meaningful relationships with others. For individuals with special needs, having language skills is not only a communication tool but also vital for social participation, education, independence, and self-sufficiency. Therefore, it is essential to support the development of language skills in individuals with special needs, conduct research, and introduce new practices. Based on this perspective, the purpose of this study is to examine the courses related to language teaching for individuals with special needs, offered in the special education departments in Turkey. Considering the importance of language teaching, no study in the literature has been found that examines undergraduate courses in this area. The study is significant for guiding future research in the field of language, providing a general framework, and offering insights for practitioners and policymakers. The study will use document analysis, one of the qualitative research methods. The document analysis method involves the examination of written materials that contain information about the phenomenon or phenomena targeted for research. In this study, information packages and course contents related to language teaching, offered in the special education departments of Turkey's education faculties, within the scope of Higher Education Law No. 2547, will be reviewed. The collected documents will be analyzed using content analysis methods. The study will seek to answer the following questions:

- 1. What are the learning outcomes of the language teaching courses offered in the special education departments of Turkey's education faculties?
- 2. What are the contents of the language teaching courses offered in the special education departments of Turkey's education faculties?
- 3. What is the proportion of language teaching courses compared to other courses in the special education departments of Turkey's education faculties?

Based on these questions, the contents will be evaluated, and recommendations for researchers and practitioners will be provided at the end of the study.





The Effect of Supporting Science Education with Gamified E-Learning Environments on Motivation and Achievement

Ferdi BAYRAK

Abstract

In today's world, technology is developing constantly and knowledge increases exponentially. Thus, it is vital to follow these developments closely to be successful in science education. New approach in science education requires active involvement of learners and to provide them with new learning environment designed specifically for digital natives which can support them to become inquiring and investigating self-learners. In this context, e-learning, which now is a part of our lives as a result of the digital transformations, is education through electronic media channels. Accordingly, the concept of gamification, which has started to become popular since 2010, has started to take its place in the field of education, although it is a technique that aims to strengthen the connection between digital systems and users and motivate them. This study investigates the effects of a gamified e-learning environment on academic achievement and motivation of learners in science education. The participants of this study were middle school students. It is our belief that the findings of this study may guide the integration of gamification in science education curriculum. A mixed method approach was utilized during study. A pre-, post-test approach was used to collect quantitative data and for this purpose academic achievement test and motivation scale were used. Qualitative data was collected through interviews. As a result of the research, it was concluded that supporting students with a gamified e-learning environment increased their academic achievement and motivation compared to the traditional methods.

Keywords: gamification, e-learning, science education, motivation, academic success



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Pre-service Teachers' Perspectives on the Use of Virtual Laboratories in Biology Education

Elif ŞAHANBAZ

Miraç YILMAZ

Abstract

The experiments and laboratory studies conducted in biology, physics, chemistry and science courses contribute greatly to students' scientific thinking and learning by doing. For this reason, it is important to integrate experiments with courses and educational technologies such as virtual laboratories, which have been developed recently. It is thought that virtual laboratories can offer alternative opportunities and innovations against some difficulties encountered during the implementation of real (live) experiments/laboratories. Biology education, which is one of the science fields where experiments have an important place, is also one of the areas where detailed evaluation of virtual laboratory technology is needed. However, in order for virtual laboratories to be effective in education and training, the views of prospective teachers who can quickly adapt to using these new technologies should be known first. The aim of this research is to examine the views of prospective biology teachers on the use of virtual laboratories. The study group of the research conducted with the qualitative case study method consists of 55 biology teacher candidates studying at two state universities in Ankara. A structured interview questionnaire including personal information and an open-ended question was used in the research. The obtained data will be analyzed with content analysis and the reliability value will be determined as a percentage. In the research results, suggestions will be made for the development of pre-service and in-service teacher education and biology education in primary and secondary education by evaluating the opinions of biology teacher candidates about virtual laboratories.

Keywords: experiment, virtual laboratory, digital educational technologies, biology education, teacher candidate.



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Analysis of Secondary Biology Textbooks in Terms of Acronyms and Eponyms

Dilara KARACA

Duygu ÜLGER

Sultan ÇIKRIK

Abstract

Textbooks are of great importance as they are used as basic educational materials. This study aims to analyze secondary biology textbooks in terms of acronyms and eponyms. The document analysis method was used in the study designed according to qualitative research design. In the study, acronyms and eponyms in secondary school 9th, 10th, 11th, and 12th-grade biology textbooks were identified and analyzed. The acronyms and eponyms obtained as a result of the examination of biology textbooks were analyzed according to their characteristics such as number, correct use of terms, spelling of terms, distribution of terms according to units and subjects, characteristics of terms, and explanations about terms. This study will likely be important in terms of the role of textbooks in learning-teaching processes, the lack of sufficient studies on acronyms and eponyms, and drawing attention to these terms.

Keywords: Textbook, Biology, Acronym, Eponym, Term.



Literature Review on the Effect of Problem-Based Learning on Students' Academic Achievement, Motivation and Attitude

Güler AKİS

Kaan BATI

Abstract

The problem-based learning method is a method that is recommended to be preferred for science teachers because it keeps students in an active role and the teacher is more in the role of a helper, thus increasing students' attitude towards science, motivation and academic achievement. This method is different from other learning approaches in terms of using problem situations in education, students working in groups, and students accessing information on their own. The aim of this study is to try to explain the change in students' attitudes towards problem-based teaching methods in science lessons, academic achievement and motivation towards the lessons by examining the research in the literature. In line with this purpose, the research question guiding the study is: How are middle school students' motivation, academic achievement and attitudes towards the course when problem-based learning method is used in science courses? Literature review, one of the qualitative research methods, was used in the study. Proquest, Eric, Yök Thesis, Taylor and Francis, JSTOR, Wiley Online Library databases were examined for articles and theses. As a result of the selection process from these databases, 16 theses and articles were analyzed. Key words (problem based learning, achievement, attitude, motivation, problem based learning, achievement, attitude, motivation) were determined while searching the databases. The articles and theses related to the subject were categorized according to the concepts of academic achievement, motivation and attitude. The articles and theses that were not related to the subject were separated and turned into a table. The methods of the articles and theses (experimental, meta-analysis, survey methods and qualitative, quantitative and mixed designs), the people studied, the results obtained and the findings were analyzed in detail. In the final stage, articles and theses related to the research question were identified, interpreted and reported. According to the data obtained from the articles and theses examined, it was found that the change in students' motivation when using problem-based learning method may not be as effective as traditional learning or may increase. When evaluated in terms of the effect of problem-based learning method on students' academic achievement, it mostly changes students' achievement positively. In addition, studies have generally found that problem-based learning method positively changes the attitude towards science course, but it has no effect on the attitude towards the course. In addition, PBL has been found to improve students' knowledge, attitudes and self-confidence. In courses where PBL was used, students developed

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

more positive attitudes towards the course and showed better performance results. In general, it has been found in experimental studies that the problem-based learning method is more effective than the traditional method at every grade level. However, in some studies, it was also found that these 3 sub-headings were not positively affected. Based on the theses and articles found, it was observed that the motivation, attitude towards science course and academic achievement of the students generally increased in the studies conducted at secondary school, high school and university level. However, in some articles, in contrast to this situation, it was also found that problem-based learning did not increase students' motivation, attitude towards science course and academic achievement. These studies were generally experimental in nature and compared the problem-based learning method with the traditional method. In line with the findings of these studies, it can be concluded that the problem-based learning method is generally more effective than the traditional method. Students' motivation and attitudes towards the course can affect their academic achievement. Since students come to the lesson with a cognitive gap, their situational interest should be increased to fill the gap. The teacher should provide this increase by making the problem-based teaching method suitable for student differences. If the teacher provides these situations, students' attitudes towards science course, academic achievement and motivation can change positively.



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Prioritisation of Sustainable Development Goals by Turkish Prospective Teachers of English

Eda KÜÇÜKARABACI

Tunay TAŞ

Abstract

This study explores the perspectives of Turkish prospective English teachers on the United Nations' Sustainable Development Goals (SDGs) set for 2030. We have administered a rank order scale to participants, asking them to prioritise the 17 SDGs according to their reasoning and viewpoints. Following the ranking, a focus group discussion was conducted with a subsample of participants to delve deeper into their justifications and understanding. The findings reveal that prospective teachers foreground survival-related SDGs, such as 'zero hunger', 'clean water and sanitation', and 'good health and well-being', reflecting Maslow's hierarchy of needs and emphasising the immediate contextual concerns within Türkiye. This research highlights and discusses the significance of understanding the (un)conscious prioritisation of SDGs amongst prospective teachers, who are crucial stakeholders in promoting sustainable development in different levels of education.

Keywords: sustainable development goals, sustainability, prospective teachers, teacher education



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Pre-service ELT Teachers' Engagement with Sustainable Development Goals Through Recycled Materials

Abide TUNCER

Ayça ASLAN

Abstract

Sustainability has become an increasingly important focus in fostering global citizenship, particularly within educational settings. This research explores the role of recycled educational materials in promoting the Sustainable Development Goals (SDGs). The study examines pre-service English language teachers' viewpoints about using recycled resources in teaching English to young learners. In this exploratory research, the data collection was done through a survey on SDG awareness and an in-depth focus group discussion with the participants, following some theoretical and practical engagement with hands-on activities using recycled materials. The findings reveal that when recycled materials are used in the preparation of tasks, there is a significant improvement in environmental literacy, which also supports sustainable practices in language teaching. With the growing use of recyclable materials among pre-service ELT teachers, the effectiveness of this method can become even more apparent. Besides creating materials through recycled supplies, the implementation of programs targeting the environmental education of teachers can bring about a drastic increase in teachers' attention to environmental matters. In this respect, the research proposes that promoting the professional development of teachers should be the key to the integration of sustainability practices into the educational process.

Keywords: exploratory research, recycled materials, sustainable development goals, teaching English to young learners



Language Improvement Of Children With Autism Spectrum Condition After Starting Inclusive Education: From The Parent's Perspectives

Hakan SARI

Hatice Begüm UYANIK

Abstract

Autism Spectrum Condition (ASC) in the other term Autism Spectrum Disorder (ASD) is defined as ASC a neurodevelopmental disorder. It is identified as a condition which is based on the presence of qualitative and significant impairment in socio-communicative abilities and social interaction. In many countries, parents seek formal assessment and identification for delayed communication and language onset or poor language skills compared to their peers. Language skills are consistently found to be the predictors of social and educational success and well-being. Experts working with children with ASC agree that early intervention is a very critical issue. Language learning is connected to early intervention and affected with it. The research reflecting this issue are very limited in Türkiye. Therefore, there is a need to design a research on this matter. The aim of this study is to explore whether the language development of children with ASC changed with the help of early inclusive education. The researchers look at if there are some changes on the development of language skills, they wanted to raise how much and in what direction these improvements are. This study was conducted with a semi-structured interview method, which is one of the qualitative research methods. The research was completed with five parents' views through semi-structured interviews. The data collected for the study were analyzed using descriptive analysis method. The findings of the study will be presented in detail in the conference because of continuing analysis of the data.



25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Health and medical informatics education: outlook via bibliometrics for the upcoming decade in Emergency Departments

Berke YILDIRIM

Fatih Cemal TEKİN

Abstract

Practicing contemporary emergency medicine can be exceedingly difficult. Emergency physicians see the full spectrum of human maladies, treating patients with a wide range of ages, social situations, and acuity. Given the limited availability of resources, such as physical space and staff, the phenomenon of "overcrowding" has grown widespread. An efficient emergency department (ED) operation is not just a business matter; ever-short delays in treatment can result in precious minutes being lost, to the detriment of the patients. Achieving the best possible medical treatment depends on efficiently collecting, organizing, ranking, and combining substantial volumes of data. A collaborative environment, the Emergency Department often necessitates collaboration and communication among several other services inside the hospital. Computers have the capability to effectively handle all this information and enhance the quality, safety, and efficiency of provision of emergency treatment. To reveal the importance of medical informatics this study aims to conduct a bibliometric analysis of the importance of medical informatics. For this aim, articles related to medical informatics in Emergency Departments (ED) from the Web of Science Core Collection between 2020 and 2024, excluding book chapters, review articles, and proceeding papers. These publications were analyzed using co-authorship, co-occurrence, and bibliographic coupling, taking into account factors such as author, country, journal, keyword, and similar variables.



Making Sense of an English Language Teacher's Identity Tensions as an International Graduate Student in Türkiye

Ufuk KELEŞ

Maysa Abed Muhammed

Özkan KIRMIZI

Abstract

English language teacher education is a multicultural field in which language learners, practitioners, and graduate students have a high potential for mobility between and across cultural, linguistic, and national borders (Jain et al., 2022). In this presentation, we narrate Presenter1's identity tensions she went through in different communities as an English language teacher, who was also an international graduate student. Presenter1 comes from XXX, Iraq, lives and works in Karabük as a "native" English teacher. Presenter2 first met Presenter1 in his master's level XXX course. Later Presenter1 became Presenter2's thesis advisee. This study was designed as an analytic (Anderson, 2006) collaborative autoethnography (Chang, 2016) to focus on her identity tensions. To that end, the presenters worked together as (a) a graduate student of English language and literature, who is in the process of writing her thesis (Presenter1); (b) her thesis advisor who is a Professor of English (Presenter2); and (c) an outsider/expert researcher who is knowledgeable in autoethnographic methodology (Presenter3). The reason why this qualitative research design was opted for was that Presenter2 and 3 thought/believed/felt that Presenter1's experiences would resonate with many other international students in Türkiye. Nevertheless, one aspect that made Presenter1's story unique was that she had a growth mindset and overcame several challenges in her story. We collected data through critical autoethnographic narratives (CANs) of Presenters 1 and 2 and their online autoethnographic conversations with Presenter3, who read through their CANs and prepared semi-structured interview questions. Rather than traditional interviewing techniques, they held rather long conversations on Presenter1's lived experiences including her communication with Presenter2 during her MA studies. These audio-recorded conversations were transcribed and coded for thematic analysis. Our findings demonstrated that Presenter1 has undergone several tensions since she came to Türkiye including a) being translingual/transcultural among monolingual/monocultural people, b) being labeled (and sometimes othered) as a "foreigner," and c) going through racial profiling as if she was one of the refugees from Syria. In the light of these findings, we believe that we will problematize the anti-refugee discourses showing that international mobility is so complex a phenomenon that cannot be decontextualized.

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Looking into a Mirror Held Up to Jarring Reality: The Deep Imprints of Poverty in Children's Poetry

Gökçe Demiryürek

Abstract

Poetry is a powerful literary form that reflects the rich expressive possibilities and subtle nuances of a language in terms of form, and creates a deep sequence of emotions and associations in terms of content. Children's poetry, in both form and content, serves as a multifaceted tool for enriching children linguistically, cognitively, emotionally, and socially. Poetry can help children develop awareness of social issues, understand society, and approach problems from different perspectives and solutions. The aim of this study is to determine how children's poetry addresses one of today's significant social issues, poverty. To this end, the poverty-themed poems of five poets who write children's poetry have been examined. The selection of poets and poems was done through purposive sampling, and the descriptive analysis method was used for the analysis of the poems. The study found that the poets hold up a mirror to society in their treatment of poverty in their poems. While the examined poems prominently feature empathetic and realistic perspectives, a common point among them is the critique of societal indifference. This study could serve as a foundation for further research examining changes in perceptions of poverty across historical periods or for more in-depth studies using a broader sample.

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Reviewing Game-Based Learning Research in Science Education with Bibliometric Analysis

Şeyma ULUKÖK YILDIRIM

Duygu SÖNMEZ

Abstract

This study aims to comprehensively examine research on game-based learning in science education using the bibliometric analysis method. In this context, 1,555 publications indexed in the Web of Science Core Collection database were analyzed using VOSviewer software. The publications were evaluated based on various criteria, such as year, author, country, source, citation counts, and keyword co-occurrence. The results revealed a significant increase in academic interest in game-based learning, particularly from 2020 onward. The USA and Taiwan emerged as the countries with the most publications and citations. The Journal of Chemical Education had the highest number of publication. Additionally, Gwo-Jen Hwang was determined to be the most prolific contributor. The most frequently used keywords included game-based learning, gamification, and humor/puzzles/games. It is anticipated that this study will accelerate ongoing research in game-based learning in science education, provide guidance to researchers, and contribute significantly to the development of the field.

Keywords: Game-based learning, Educational games, Bibliometric analysis, Science Education

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

An Investigation of The Views of Foreign Language Teachers With Inclusion Students in Their Classrooms on The Teaching Methods and Techniques They Use in Their Teaching Processes: A Qualiitative Approach

Hakan SARI

Raziye UĞURLU

Based on the fact that students have different abilities and needs, mainstreaming practice aims to include individuals with special needs in general education environments provided that support special education services are provided. In these classes, students with special needs are not educated in a separate educational environment, but in general classes with other students. In Turkey, mainstreaming was legalized with the Law No. 2916 on Children in Need of Special Education, which entered into force in 1983. When the literature is examined, it is seen that the studies on teaching methods and techniques used in foreign language teaching processes to students with special needs are quite limited. The aim of this study is to examine the opinions of foreign language teachers who have inclusive students in their classrooms about the teaching methods and techniques they use in teaching processes. The method of this research is semi-structured interview method. The participant group of the study consisted of 10 teachers working in Konya Meram Nuri Pakdil Anatolian High School and Mehmet Karaciğanlar Mevlana Imam Hatip Secondary School who had inclusive students in their classes. Data were collected through a semi-structured interview form. The analysis of the data was analysed by descriptive analysis method. The findings of the research will be presented at the congress.

Keywords: Qualitative Research, Teacher Education, Individuals with Special Needs, Inclusion Practice.



Dil ve Konuşma Güçlüğüne Sahip Öğrencilere Yabancı Dil Öğrenme Süreçlerinde Karşılaştıkları Güçlüklerin Öğretmen Görüşleri Açısından İncelenmesi

Hakan SARI

Hikmet Beyza YAKICI

Abstract

Students with speech and language difficulties may face challenges in learning academic skills for various underlying reasons. Some of these reasons are well-documented in the literature, such as cleft palate, brain injuries, cerebral palsy, genetic causes, hearing impairments, intellectual disabilities, autism, and lack of sufficient linguistic input due to bilingualism. However, in our country, foreign language education is not typically included in the curriculum for students with speech and language difficulties. Like other academic areas, these students may also encounter challenges in learning a foreign language. Research on these challenges is quite limited.

This study aims to investigate the difficulties faced by students with speech and language disorders in their foreign language learning processes from the perspective of teachers. The methodology of this study is a qualitative research design, employing a semi-structured interview technique. The participants are 11 English teachers who teach English to students diagnosed with speech and language difficulties. The data collection tool is a semi-structured interview method developed by the researchers. The data were analyzed using a descriptive analysis method. The findings of this research are listed below:

- 1. Students with speech and language difficulties exhibit low interest and motivation towards foreign language learning.
- 2. Students have difficulty understanding the stimuli teachers provide during the foreign language teaching process.
- 3. Students struggle to comprehend concepts presented in either textual or verbal stimuli during foreign language instruction.



- The materials and technologies used in foreign language teaching do not play a sufficient role in facilitating students' comprehension of foreign language learning.
- 5. Students experience difficulties in reading English texts, particularly with pronunciation, articulation, stress, fluency, and reading comprehension.
- 6. Due to a lack of retention and generalization of concepts, some students quickly forget the vocabulary and concepts taught in foreign language lessons.
- 7. The limited vocabulary of these students leads to significant difficulties in completing homework assigned by foreign language teachers, and they often do not receive support from their families.
- 8. The study found that assessment and evaluation processes, especially for students with stuttering, do not provide a fair assessment of their speaking skills, as their specific challenges are not adequately considered.



Navigating Challenges In Immigrant Education: Syrian Refugee Students' Classroom Dynamics, Teacher And Parent Perspectives, And Coping Strategies

Berfin YAMAÇ

Abstract

This paper investigates the challenges Syrian refugee students face in Turkish classrooms, focusing on the critical aspect of language proficiency. The study aims to understand the impact of language barriers on academic performance, social integration, and the effectiveness of existing integration programs. The study engaged 18 teachers responsible for 64 Syrian students, exploring their experiences and perspectives through a mixed-methods approach. Utilizing surveys, the research delved into the coping strategies employed by teachers, the academic challenges Syrian students face, and the utilization and awareness of integration programs. The study also examined communication dynamics between teachers and parents. The findings underscore the central role of language barriers in hindering the academic and social integration of Syrian refugee students. Teachers identified the need for more Turkish language competency as the primary challenge, impacting lesson comprehension and hindering effective communication. Limited awareness and utilization of integration programs were reported, revealing gaps in addressing the holistic needs of Syrian students. The discussion section will delve into the nuanced aspects of language education and its implications for integrating Syrian refugee students. Methodological limitations will be acknowledged, including participant reach and the multilingual survey process. Future research directions will be proposed, emphasizing the need for comprehensive language education programs and a broader understanding of societal attitudes toward the permanence of Syrian refugees in Turkey.

Keywords: Syrian refugee students, teachers, language barrier, coping strategies



An Investigation of the Difficulties Related to Executive Functions Encountered by Students with Specific Learning Disabilities in the Reading-Writing Learning Process from the Perspective of Teachers

Hakan SARI

Emine Beste AKSOY

Abstract

Executive functions are mental abilities that encompass the skills to plan, organize, initiate, monitor, and adapt cognitive processes when necessary. These functions are crucial for complex academic tasks such as reading and writing. However, students with specific learning disabilities often exhibit significant weaknesses in these areas. This can lead to major challenges in the reading and writing learning process for students with specific learning disabilities. To address these challenges, it is essential first to examine teachers' perspectives on the issue. Therefore, the aim of this study is to investigate the challenges related to executive functions that students with specific learning disabilities face during the reading and writing process, based on teachers' views. In line with this aim, the semi-structured interview technique, one of the interview methods, was used in this study. The study group consisted of 10 classroom teachers working with students diagnosed with specific learning disabilities. For participant selection, the easily accessible sampling method, one of the purposive sampling techniques, was used. A semi-structured interview form, developed by the researchers, was prepared to collect qualitative data and to be used in the interviews. The semi-structured interview questions were prepared based on a review of the literature. These questions were then presented to two academics with doctoral degrees in the field of special education, and based on their feedback, the questions were revised. A pilot interview was conducted with three individuals, and further adjustments were made to the questions before the final version was once again presented to experts. In light of the feedback received, the data collection form was finalized for use in the research. The data collected will be analyzed by the researchers using content analysis. Since the analysis is still ongoing, the results will be presented during the conference.

Keywords: specific learning disability, reading and writing, executive functions, qualitative research method, teachers



Biotechnology Education: Needs Analysis For In-Service Training Programs for Teachers

Merve ÖZDEMİR

Semra MİRİCİ

Abstract

Biotechnology is a rapidly evolving and interdisciplinary field that has gained significant momentum in recent years. The primary aim of this study is to analyze the needs related to biotechnology education and thereby enhance the effectiveness of in-service training programs designed for teachers. To this end, studies that address the challenges and propose solutions in biotechnology education have been comprehensively reviewed using databases such as Google Scholar, the National Thesis Center of the Council of Higher Education, and Web of Science. During the literature review, keywords such as "biotechnology education," "biotechnology and in-service training," and "biotechnology needs analysis" were used to identify relevant articles and theses published between 2005 and 2024. The reviewed studies were classified based on sample groups (pre-service teachers, in-service teachers, and high school students) and were further analyzed in terms of their objectives, methods, and outcomes. The findings indicate that while theoretical knowledge in biotechnology is relatively strong, there are significant shortcomings in the practical application of this knowledge. Although teachers recognize the importance of application-based biotechnology teaching, many refrain from implementing such practices due to a lack of necessary tools and equipment or a belief that they are not sufficiently equipped to conduct these activities. This situation negatively impacts the effectiveness of biotechnology education. In conclusion, it was determined that there is an urgent need for comprehensive and practice-oriented in-service training programs to address the existing gaps in biotechnology education and enhance teachers' practical skills.

Keywords: Biotechnology education, in-service training program, needs analysis



in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Biology Preservice Teachers' Views on Virtual Laboratory Applications

Semra MİRİCİ

Aycan KİBAR ERDOĞAN

Abstract

The aim of this study is to determine the views of biology preservice teachers on virtual laboratory applications and assess the contributions of these technologies to the educational process. The study is designed using a qualitative research method and was conducted with 70 preservice teachers from the Biology Education Department at Faculty of Education. Data were collected using a semi-structured interview form developed by the researchers and analyzed through descriptive and content analysis methods. The findings indicate that biology preservice teachers believe virtual laboratories offer significant advantages in education. Participants noted that virtual laboratories are effective in translating theoretical knowledge into practice, provide flexibility in terms of time and space, and offer a safe learning environment. These advantages are particularly important in contexts where traditional laboratory resources are limited. However, some disadvantages of virtual laboratories were also observed. Participants pointed out that virtual laboratories cannot fully replace real laboratory experiences and may be insufficient in developing sensory and practical skills. It was emphasized that real laboratory experiences play a crucial role in developing students' scientific methods and laboratory techniques. The study suggests that virtual laboratories should be considered a complementary tool to real laboratory experiences. It concludes that integrating virtual laboratories into educational processes alongside traditional laboratory practices could provide a more effective learning environment, offering both theoretical and practical knowledge and skills.

Keywords: Virtual laboratory, Biology education, Preservice teacher



The Use of Augmented Reality in the Teaching of the Water Cycle*

Müge Ezgi AYYILDIZ

Pelin DEMİR

Nazlı Gökben ATILBOZ

Abstract

In recent years, augmented reality technology has been widely used to help students understand complex subjects and increase their interest in the topic. This study aims to investigate the impact of augmented reality applications on the academic performance and interest of pre-service teachers when teaching the water cycle. The research involved 32 pre-service biology teachers. Data was collected using the Water Cycle Achievement Test, Ecology Interest Questionnaire, and Augmented Reality Application Opinion Form. The water cycle topic was taught using a mobile augmented reality application. The pre-service biology teachers' knowledge of the water cycle was assessed using the Water Cycle Achievement Test, and their opinions about ecology topics were evaluated using the Interest in Ecology Questionnaire before and after teaching the subject. The pre-service teachers' opinions about the teaching supported by the augmented reality application were obtained using the Augmented Reality Application Opinion Form. Data analysis was conducted using the dependent groups t-test. Additionally, the pre-service biology teachers' opinions about the augmented reality application were evaluated through content analysis. The results indicated that augmented reality applications had a significant impact on increasing the achievement and interest level of pre-service biology teachers. Most pre-service biology teachers reported that the augmented reality applications made learning about the water cycle more engaging, and memorable, and helped to grasp abstract concepts.

Keywords: Biology Education, Water Cycle, Augmented Reality

*This study was supported by TUBITAK 2209-A University Students Research Projects Support Programme with Project No. 1919B012309410.



Taxonomy Applications in Coastal Ecosystems: Scientific Results and Evaluation of Project-Based Learning Method

Songül YURTDAŞ

Özgül SU ÖZENİR

Hikmet SÜRMELİ

Abstract

The goal of this study is to support the spread of scientific knowledge by educating biology teachers about applied scientific research methods, techniques, and processes. It also aims to stimulate the target audience's curiosity, research, and desire to learn by offering a training program that includes interactive, visualized applications for identifying scientific facts and acquiring knowledge in an understandable manner. In this particular context, thirty biology teachers participated in a seven-day program that included instruction on topics such as laboratory safety, first aid training, ethics in scientific research, matters to be considered, data analysis, field studies, taxonomy and its relationships to other disciplines, nature of science, teaching and applied activities, project-based learning, argumentation based teaching model, basic concepts related to scientific research, and data analysis and reporting in scientific research. The program was led by experts in the relevant fields. Pre-test-post-test models from quasi-experimental designs were used in the investigation. Peer and jury evaluations by academicians were conducted as part of the project to assess participant presentations at the conclusion of the "Introduction of Scientific Research Reporting Techniques and Conversion to Publication" activities. The participants' self-efficacy ratings for project-based teaching and project competition consultancy competency scores showed a statistically significant difference that was in favor of the post-test. Upon reviewing the results of the jury and peer evaluations, it became evident that the groups that gave presentations had high presentation scores in accordance with the determined criteria. The participants gave the activities a general rating and said that each one was thought-provoking, entertaining, informative, practical, unique, and helpful for their professional growth.

25-29 October 2024

in collaboration with Necmettin Erbakan University School of Foreign Languages in Konya, Turkey

Nutrition Education in Türkiye

Burak KARATAŞOĞLU

Tuğçe Nur ŞİMŞİR

Abstract

The significance of nutrition education in Turkey is crucial in addressing the rise of chronic diseases such as obesity, diabetes, and cardiovascular conditions. Instilling healthy eating habits plays a critical role in enhancing individuals' quality of life and strengthening public health. Therefore, nutrition education programs must be made more comprehensive, effective, and sustainable. The aim of this study is to examine the importance of nutrition education in Turkey, the current issues within the field, and proposed solutions to these problems. Since 1970, Hacettepe University's Department of Nutrition and Dietetics has developed various projects in collaboration with the Ministry of National Education, the Ministry of Agriculture, and the Ministry of Health to raise public awareness about nutrition. Among the programs developed by the Ministry of Health are the "Turkey Healthy Eating and Active Living Program" in 2010, the "Diabetes in Schools Program" in 2010, and the "School Health Protection and Promotion Program" in 2016. In addition to these initiatives, there are four large-scale nutrition and health studies: the National Nutrition, Health, and Food Consumption Study conducted in 1974; the Food Consumption and Nutrition Study in 1984; the Turkey Nutrition and Health Survey (TBSA) in 2010; and the Turkey Nutrition and Health Survey in 2017. This study reviewed 25 articles and three theses, identifying several challenges related to nutrition education in Turkey, including a lack of nutritional knowledge, insufficient educational programs, and limited access in rural areas. Based on the findings of these studies, it is recommended that ongoing analysis of the current situation through scientific approaches be strengthened, along with continuous evaluation, and that necessary measures be implemented to address these issues.

Keywords: nutrition education, public health, nutrition policy, community



The Role of Experiential Learning in Developing Students' Attitudes towards Sustainability in Tourism Education

Esen SUCUOĞLU

Nesrin M. BAHÇELERLİ

Abstract

Global developments have caused the characteristics of new generations to change, and the education system needs to be updated and keep up with the age. Especially with the effect of technological developments, fast and easy access to information has enabled personal and continuous learning to prevail. This situation causes traditional educator-centred education to lose its effectiveness. In this context, tourism education has become one of the most discussed issues in Turkey and abroad. It should be emphasised that the education currently provided by traditional methods does not fit the real situation of the current industry and cannot meet the needs of the industry. For this reason, great importance is attached to the student-centred redesign of tourism education with innovative and modern learning methods. Today, tourism has a significant impact on environmental, economic and social sustainability. The spread of sustainable tourism concepts requires sustainability awareness of individuals working in this field. In this context, the teaching methods used by tourism education institutions in the process of making students accept the principles of sustainability are very important. Experiential learning can provide students with practical experiences beyond theoretical knowledge, thus effectively shaping students' attitudes towards sustainable development. This study investigates the role of experiential learning in developing attitudes towards sustainable development among tourism education students. This study aims to reveal the impact of experiential learning methods in raising students' awareness of sustainable development and to guide future educational strategies and practices.

Keywords: Tourism education; experiential learning; sustainability



Reverse Mentoring: A Content Analysis

Esra ULUKÖK

Abstract

The extraordinary developments in technology have deeply affected educational systems and organizational structures, leading many organizations to prioritize reverse mentoring practices. Reverse mentoring has become increasingly important in recent years due to its contributions to individual development and organizational efficiency. This approach plays a vital role in managing generational differences, creating collaborative work environments, and adapting to new-generation technologies. Although reverse mentoring stands out as a method that supports individual and organizational development and encourages a more open communication culture, there is still insufficient knowledge in this field. This study aims to examine the articles on reverse mentoring in the Business and Management field in the Web of Science Core Collection database using the content analysis method. The research findings will contribute to a better understanding of the general trends in research on reverse mentoring in the Business and Management field.

Keywords: Mentoring, reverse mentoring, generations



Microteaching Structural Equation Modelling on the Influence of YouTube Video Technology on Teacher Trainees' Academic Performance

Haruna ABUBAKAR

Hasnah Binti MOHAMED

Abstract

Microteaching is a teacher training technique that focuses on helping teachers practice specific teaching skills in a controlled and simplified environment. It involves teaching a short lesson to a small group of peers or students and receiving feedback to improve. it is a training ground in macro society before moving to macro society. This study uses Structural Equation Modelling (SEM) to examine the relationship between YouTube video technology, micro-teaching skills, and academic performance among student-teacher trainees. Four micro-teaching skills are selected as variables. Results show that set induction and reinforcement strongly predict YouTube usage and performance, while instructional materials and stimulus variation also play a role. The study recommends prioritizing micro-teaching skills, integrating YouTube into teacher training, developing quality instructional materials, and fostering a continuous learning culture.



Teacher-Trainees Awareness and Perception of YouTube as a Teaching Resource in Colleges of Education in Nigeria

Haruna Abubakar

Suleiman Balarabe

Hasnah Binti Mohamed

Abstract

The development and dissemination of knowledge and information in the discipline of education are significantly facilitated by technology in the digital age. The application of technology in the classroom has the potential to improve student enthusiasm and learning as well as teachers' competence. This research investigates the awareness and perception of YouTube as a teaching resource among teacher-trainees in Colleges of Education in Nigeria. The study explores how trainee teachers view YouTube's potential to enhance their teaching skills, considering both opportunities and challenges. A mixed-methods approach was used, involving surveys and interviews, to collect data from 200 teacher-trainees across selected institutions. Findings reveal moderate awareness but positive perception regarding the effectiveness of YouTube as an educational tool. However, issues such as data affordability and lack of training limit its use. The paper concludes by providing recommendations for improving YouTube's integration into teacher education in Nigeria

Keywords: YouTube, Teacher-Trainees, Awareness, Perception



Bibliometric Analysis of Education Marketing

Ümmü Saliha EKEN İNAN

Abstract

From the moment human beings were created, they have been instilled with a curiosity to learn about everything that happens around them. The learning process continues until death. There is no age, time or place for learning. The phenomenon of learning actualizes itself through the impulses that come from within the person. In this context, learning continues with the drive of curiosity, and this process becomes the focus of marketing science in the educational field of our lives. This study aims to evaluate the research conducted in the field of Education Marketing through bibliometric analysis. For this purpose, 191 studies were identified that were scanned in the Web of Science database between 2001 and 2024 and included "education marketing" in their title. Among these publications, the author with the most publications, the source with the most publications, the documents with the most references and the thematic map of the documents were created. These studies were written by 457 different authors and published in 123 different sources. The studies concluded that the annual growth rate was 8.832%. Therefore, it is thought that the increasing interest will contribute to the academic literature.

Keywords: Education Marketing, Marketing, Bibliometric Analysis.