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Correspondence Address

OJER Dergisi, Eskişehir Osmangazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Meşelik Yerleşkesi, Eğitim Fakültesi Yeni Binası B Blok Kat.4, 26480 Eskişehir/Türkiye

E-mail: ojer@ogu.edu.tr Tel: +902222393750 /ext. 6300

Fax: +90 222 239 82 05

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Articles

Editorial Commission

Editor-In-Chief

M. Zafer BALBAĞ, Ph.D.
Eskişehir Osmangazi University, TÜRKİYE
E-mail: zbalbag@ogu.edu.tr
Tel: +90-222-239 3750 (ext. 6300)
Fax: +90-222-239 82 05
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Editor-In-Chief Assistant

Emre EV ÇİMEN, Ph.D.
Eskişehir Osmangazi University, TÜRKİYE
E-mail: evcimen@ogu.edu.tr
Tel: +90-222-239 3750 (ext. 6302)
Fax: +90-222-239 82 05
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Editorial Assistants

Z. Melis DEMİR, Ph.D.
Eskişehir Osmangazi University, TÜRKİYE
E-mail: zmelisdemir@gmail.com
Tel: +90-222-239 3750 (ext.6812)
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Fakültesi, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Elif TUNÇEL, Researcher
Eskişehir Osmangazi University, TÜRKİYE
E-mail: eliftuncel@gmail.com
Tel: +90-222-239 3750 (ext.6837)
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Fakültesi, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Gözde TEKBAŞ, Researcher
Eskişehir Osmangazi University, TÜRKİYE
E-mail: gozde.tekbas@ogu.edu.tr
Tel: +90-222-239 3750 (ext.6754)
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Fakültesi, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Merve YAVUZ, Researcher
Eskişehir Osmangazi University, TÜRKİYE
E-mail: merve.yavuz@ogu.edu.tr
Tel: +90-222-239 3750 (ext.6782)
Postal Address: Eskişehir Osmangazi Üniversitesi, Eğitim Fakültesi, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

Proofreaders

Emine EREN GEZEN, Ph.D.
Eskişehir Osmangazi University, TÜRKİYE
E-mail: egezen@ogu.edu.tr
Tel: +90-222-239 3750 (ext.6853)
Postal Address: Eskişehir Osmangazi Üniversitesi, Yabancı Diller Eğitimi Bölümü, Meşelik Yerleşkesi 26480 Eskişehir / TÜRKİYE

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Osmangazi Journal of Educational Research (OJER) is published by the Institute of Education of Eskisehir Osmangazi University, Türkiye.

OJER is an online, open-access, international, scholarly, peer-reviewed journal offering scholarly research articles on various topics in all areas of educational sciences.

All submitted manuscripts must be original, previously unpublished and not under consideration for publication in any type of publication outlet.

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"Victory belongs to those who can say victory is mine.
Success belongs to those who start by saying "I will succeed" and finally say "I did."

(Mustafa Kemal ATATÜRK)

Dear Readers,

The main purpose of education is to process, develop, specialize and enable as a useful producer the inherent talents in humans. Education covers both theoretical knowledge and practical skills and contributes to individuals' personal development, professional competence and social adaptation. Education is the driving force of individual success and social development; and in this context, research that shapes education is the basis of educational practices and policies. As Henri Poincaré stated, "Science is built of facts, just as a house is built of bricks. But collecting facts is not science. Just like a cluster of bricks doesn't mean a house." With his words, he emphasizes that science has a certain systematic and methodology. Educational research is an academic discipline that studies educational systems, methods and processes. These studies use a variety of methods and theories to understand teaching and learning processes, evaluate educational policies, and improve the achievement of teachers and students. Educational research includes research conducted in many fields and subjects in order to understand the dynamic structure of education systems, develop teaching strategies and increase student success. These studies on innovations, problems and opportunities in the field of education provide researchers, practitioners and policy makers; It provides important information that will contribute to shaping the educational environments of the future. Improving the quality of education requires constant review of not only teaching methods but also educational policies.

With this motivation, **OJER (Osmangazi Journal of Educational Research)** aims to contribute to educational research and facilitate the sharing of educational knowledge. OJER is published twice a year in English by Eskişehir Osmangazi University Institute of Educational Sciences. It is an online, open accessed, international, peer-reviewed journal that offers scientific research articles in all fields of educational sciences. Qualitative and quantitative mixed method researches and compilation studies in many fields whose subject is education and training; research results from theory to practice are included. Our goal is to promote researches that are original, creative, enlightened and that shape the future of education with emphasis on ethical values.

In this issue of **OJER**, there are important studies that will contribute to the field. We would like to express our gratitude to the researchers, the reviewer referees, the editorial board, the journal secretariat and our readers who examined our journal and reached us via e-mail. In this issue of **OJER** of Spring 2024, 7 studies are presented, as introduced below:

The 1st article of this issue is entitled "Investigating Students' Problem Solving Achievements, the Modeling Steps reached and Modeler Types in the Process of Mathematical Modeling Activities" written by Özlem ÇELİKKOL, and Aytaç KURTULUŞ. The aim of this study is to identify the effect of mathematical modeling activities applied as action plans on the development of students' achievement in solving algebraic verbal problems, as well as to investigate the mathematical modeling competencies they use during these activities and the modeling steps they reach. Moreover, the types of mathematical modelers that the students demonstrated during this application process were examined in the study. The study was conducted as an action research with a total of 15 7th grade students in rural areas. The data were collected through observations, researcher and student diaries, as well as interviews conducted with students. As a result of the study, it was confirmed that students' mathematical modeling competencies were related to competencies such as general mathematical knowledge or verbal comprehension, and it was also revealed that students' mathematical knowledge competence could be examined in more detail. It was also found that students could achieve competencies through group work and their success in solving the verbal algebraic problems generally improved based on their mathematical modeling competencies.

The 2nd article of this issue is entitled "Examining Occupation Fields of Programs According to Artificial Intelligence: Anadolu University Open Education System Case" written by Sefa Emre ÖNCÜ, and İrfan SÜRAL. Anadolu University's Open Education System (OES) accommodates over one million students and has incorporated an AI-based Virtual Assistant for non-academic support since 2022. While OES offers abundant information about its programs on its website, there is a notable absence of support services providing job recommendations related to students' chosen programs. This gap in student support extends to the post-graduation phase, with the Virtual Assistant lacking a concept for guiding students in finding employment opportunities. Recognizing the need for comprehensive assistance, this study sought to leverage AI capabilities to offer job

recommendations by extracting information from the objectives of 63 OES programs. The initial inquiry involved requesting AI-generated job recommendations based on the stated objectives of these programs. Subsequently, the Virtual Assistant was tasked with providing insights into the occupation fields associated with OES programs. Analysis of the AI's responses, along with the classification of occupations according to the International Standards of Classifications of Occupations (ISCO) and the International Standard Classification of Education (ISCED), forms the core of this study. Contrary to trends observed in most European countries, the predominant number of graduates in Türkiye emerges from business and management fields. However, the correlation between graduation rates and subsequent job placements appears suboptimal within the labor force and employment landscape. The study advocates for the integration of AI in offering job recommendations, incorporating graduation and employment rates. This approach enables students to seek guidance on suitable programs aligned with their skills, fostering a more informed decision-making process. The study underscores the potential for higher education institutes to share employment and labor force data.

The 3rd article of this issue is entitled "Comparison of the Effect of Teachers Speaking Only English in English Language Teaching on Students' Anxiety According to Gender and Graduation Status: A Quantitative Research" written by Kamil YAR, and Fatih ÇEMREK. This casual comparative study investigated the impact of exclusive English Language instruction by teachers on students' anxiety levels in the context of English language learning, with a particular focus on the students' graduation status. The research was conducted with 450 university students enrolled in English language programs at two private educational institutions in Eskişehir. The participants were attending English speaking lessons delivered by both local and foreign instructors. The findings revealed that the exclusive use of English by teachers during second language instruction did not significantly impact students' anxiety level based on gender. However, a noteworthy distinction emerged between university graduates and non-graduates, suggesting that anxiety levels were lower among the former group.

The 4th article of this issue is entitled "Examination of Elementary School Mathematics Teachers' Mathematical Modelling Attitudes in Terms of Various Variables" written by Esra ALTINTAŞ, Şükrü İLGÜN, and İsmail SOYTETİR. This study aims to examine elementary mathematics teachers' attitudes towards mathematical modelling in

terms of various variables. The current study is particularly important as it is one of the few ones in our country to investigate this type of work, focusing on the attitudes of elementary mathematics teachers towards mathematical modelling across all sub-dimensions. A survey model, one of the quantitative research methods, was used, and the sample of the study consisted of 102 elementary mathematics teachers working at official secondary schools and official imam hatip secondary schools in Aydın province. The research revealed that elementary mathematics teachers exhibit a low level of attitude towards mathematical modelling. Although their motivation sub-dimension towards mathematical modelling was high, the real-life sub-dimension was moderate, while the constructivism and understanding sub-dimensions were low. However, it was found that the sub-dimension and overall scores of the mathematical modelling attitude scale of elementary mathematics teachers did not differ according to gender, faculty of graduation, age, and professional experience, but they did differ according to level of education.

The 5th article of this issue is entitled "Teacher Disappointments from Teacher's Perspective" written by Semiha ŞAHİN, Ömer DEMİR, and Yavuz Kamil ŞEVİK. The principal aim of this paper is to gain a comprehensive understanding of teachers' encounters with disappointment, specifically focusing on their daily experiences in school settings. By employing a qualitative research methodology, this investigation adopts a phenomenological framework. The application of thematic analysis enabled an in-depth exploration of teachers' experiences in relation to the phenomenon of disappointment. The analysis was rooted in data collected through semi-structured interviews with 28 teachers from schools in İzmir, Türkiye. The findings of the research reveal that the primary sources of teachers' disappointments include the education system, educational administrators, parents, students, the teaching profession, and colleagues. These key themes were meticulously examined in the study, and both the positive and negative impacts of disappointments on teachers were also deliberated.

The 6th article of this issue is entitled "Differentiated Instruction in the World and Türkiye through Studies" written by Zeynep Ecem ALKIN, and Burcu ANILAN. In this study; to reveal the change process of differentiated instruction approach from past to present, studies published in English and Turkish languages were examined according to various variables and it was aimed to compare them according to foreign and domestic perspectives. The research data consisted of Turkish and English articles published on

differentiated instruction approaches between 2006 and 2023. The data were obtained from reliable sources by searching the Google Scholar database for Turkish articles and the Web of Science database for English studies. As a result of document analysis, it was found that more teacher-oriented and process-planning studies were conducted in English, while more student-oriented process-planning was observed in Turkish studies. Based on these results, it is recommended that researchers conduct studies with groups such as parents and administrators to observe the effects of the process on different data groups.

The 7th article of this issue is entitled "Investigation of Middle School Students' Attitudes towards Mathematics Course in the Context of Different Variables (Eskişehir-Türkiye Case)" written by Emin ÖZEN, and Funda ÇIRAY ÖZKARA. This study aims to investigate middle school students' attitudes towards mathematics lessons in the light of various variables. A quantitative cross-sectional survey approach was used in the design of the study. It was tried to understand how these variables affect students' attitudes towards mathematics. Various variables such as gender, grade level, school type, technology use, use of concrete materials/activities in lessons and use of Education Information Network (EBA), an online platform for distance education, were taken into consideration. According to the findings, students' attitudes towards mathematics lessons are positively affected by educational policies, curriculum designs and the creation of concrete materials and activities in the classroom. In particular, a detrimental change was observed in the attitudes of students who used EBA less. The perspective provided by this study is crucial for understanding middle school students' attitudes about mathematics in learning environments. It is also recommended that the study be extended to cover more samples and regions, as the findings can serve as a basis for further research.

See you in the next issue…

"Stay with Science, Stay with Us"

M. Zafer BALBAĞ, Ph.D.
Editor In Chief
Director of Institute of Education
Eskişehir Osmangazi University, Türkiye