



Editorial

The Editorial Board of International Journal of Research in E-learning (IJREL) is privileged to present a new volume 10(1) 2024. The content of the current issue was divided into three chapters. The first chapter is devoted to Theoretical, Methodological and Practical Aspects and Psychological Determinants of ICT and E-Learning in Education and includes three articles. The second contains also three articles concerned with Innovative Methods and Technology in Education. The third concerns Research on Distance, Online and Blended Learning Before, During and After the Pandemic Time of COVID-19 and includes two articles.

The first article of the volume Chapter I: “Theoretical, Methodological and Practical Aspects and Psychological Determinants of ICT and E-Learning in Education”, was prepared by **Anna Ślószarz** from University of National Educational Commission in Krakow, and titled “**MOOCs: Global Business Goals and Local Educational Strategies**”. The Author stressed that MOOCs is a device with which academic centers spread the current state of knowledge, while business entities facilitate the development of competencies, particularly in business, economics and IT. Simultaneously, the paradox is that although MOOCs courses are open to global users, they contain distinctive features of their inventors’ and administrators’ culture because they have been created locally. In order to identify the cultural characteristics evident in the content of MOOC courses, 267 courses on creative writing posted on five platforms were analyzed: Coursera (USA), FutureLearn (UK), XuetangX (China), JMOOC (Japan) and Skill Academy (Indonesia). Skill Academy and Coursera were focused on business-marketing goals, although they represented different cultures. Chinese, Japanese and Indonesian courses reflected the responsiveness of those cultures and were people- and affiliation-oriented. They employed a holistic approach to teaching (emphasis on context), i.e., operated with live lectures, which had not happened on Western platforms. Among conclusions for a MOOC to be useful to representatives of another culture, not only translation into another language is needed, but also a proper modification of learning objectives and methods.

A team of Authors, **Iwona Mokwa-Tarnowska** from Gdansk University of Technology and **Viviana Tarnowska** from University of Sussex, presented the second text titled: “**Evaluating the Impact of Gamification on Learning**”

Effectiveness in Technical Vocabulary Instruction". They emphasize that with the rise of digital education, the integration of gamified elements has emerged as a potential strategy to enhance student engagement and comprehension in various academic disciplines. This study seeks to evaluate the impact of gamification on learning effectiveness in the domain of technical vocabulary instruction during an online course. A mixed-methods approach was employed, involving data collection from students enrolled on an online technical vocabulary program offered by the Language Centre at Gdansk University of Technology. A quantitative analysis of placement test scores, the frequency of using course material and final grades was conducted to understand their impact on learning outcomes, and data from surveys provided insights into students' perceptions and experiences with gamified activities. The study's outcomes contribute to the growing body of research on gamification's potential benefits in online learning environments, especially in the context of technical vocabulary instruction, and offer valuable implications for educators and course designers seeking innovative approaches to optimize learning experiences in virtual settings.

Valeriia Necherda from the Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine, **Kateryna Bezruk** from the Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine, **Zhanna Petrochko** from the Borys Grinchenko Kyiv Metropolitan University, Ukraine, **Valentyna Kyrychenko** from the Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine, **Olena Denysiuk** from the Borys Grinchenko Kyiv Metropolitan University, Ukraine, prepared the article titled: "**Formation of Socially Successful Personality of Adolescent Pupils by Means of Gamification (Kyiv City, Ukraine)**". The research highlights the essence of gamification and the results of teenagers' participation in the educational program with the elements of gamification called "Social successfulness" in the educational process of educational institutions. Theoretical methods applied involve analysis, synthesis, comparison, systematization, generalization of materials from psychological and pedagogical sources regarding the problem of social successfulness and the possibilities of its formation in adolescents in the conditions of out-of-school and general secondary education institutions, specification for harmonizing the content of the curriculum devoted to "Social successfulness". Empirical methods used involve observation, questionnaires for collecting empirical information, blitz surveys concerning the awareness of the characteristics of a successful personality. The article carried out a pedagogical reflection and found out that, according to the results of the blitz survey, teenagers verbalize the two most common portraits of a socially successful personality (based on external indicators of success and personal qualities). According to the results of the questionnaire, it was found out that the participation of teenagers in the "Social Successfulness" program contributes to their positive and optimistic attitude towards themselves and their life prospects.

Chapter II contains three texts. The article on “**Interactive RShiny Reports – Independence and Autonomy in Medical Data Visualization**” prepared by **Justyna Marcinkowska and Magdalena Roszak** from Poznan University of Medical Sciences, Department of Computer Science and Statistics, discusses the use of the R language, especially the RShiny tool, to create interactive reports in the field of medical data analysis. The Authors emphasize the need for an interdisciplinary approach to teaching statistics among medical students. An alternative to traditional static reports was presented, proposing the creation of interactive web applications that enable exploration, analysis and visualization of medical data changing in real time. The use of the R language as an open source tool allows for the development of medical students’ competences in the field of data analysis and the adaptation of research tools to individual needs. A draft lesson plan using sample medical data on cervical cancer was also presented, along with a proposal for specific analyzes of these data and their visualization using interactive RShiny reports. The article ends with a discussion on the role of learning the R language in the education of students of Polish medical universities and the need to expand the educational offer for them with courses in data analysis in an open source environment.

Bulgarian Authors, **Todorka Glushkova and Anna Malinova** from University of Plovdiv, Bulgaria, presented the text on: “**Artificial intelligence is increasingly entering all spheres of our lives, including the sphere of education**”. These technologies offer numerous advantages and opportunities to perform various activities and tasks throughout the educational process. This article discusses some aspects of the application of AI technologies to improve personalization, accessibility, and interactivity in school education, and especially in learning STEAM subjects. The Authors aim to propose approaches to successfully integrate AI into the work of teachers and facilitators during the preplanning phase of lessons, the preparation of personalized tasks for students, the process of testing and assessing knowledge, as well as in group and project-based learning. The article shares the experience of teaching a compulsory computer science course as well as working in an interest club related to artificial intelligence and robotics with 6th grade students in secondary school, highlighting the potential of certain chatbots to support and enrich the process of programming.

Polish team of Authors, **Małgorzata Przybyła-Kasperek, Rafał Doroz, Agnieszka Lisowska, Grzegorz Machnik, Arkadiusz Nowakowski, Krzysztof Wróbel, Beata Zielosko** from the University of Silesia in Katowice, Institute of Computer Science, Poland, wrote the manuscript titled: „**Exploring the Educational Efficacy and Potential of 24-Hour Hackathon Programming Marathon – HackEmotion**”. This article addresses the issue of modern didactics and student motivation for self-learning as well as tackling significant practical challenges. In technical and STEAM (Science, Technology, Engineering, and Mathematics) education, achieving high levels of motivation is particularly

important, as students often become overwhelmed by the vast amount of information and opportunities which lead to diminished interest. At the Institute of Computer Science at the University of Silesia in Katowice, a Hackathon – a 24-hour programming marathon – was organized to enhance student engagement. During this event, students confronted a critical problem in modern society, i.e., emotion recognition. The main research questions posed during the research were: RQ1: At what level of quality was the Hackathon event organized? Were students well informed and felt cared for during this event? RQ2: What aspects and properties did motivate students most to take part in events organized at the university like Hackathon? RQ3: What competencies, knowledge and skills were developed by participants in the Hackathon? RQ4: Do students consider issues related to recognizing emotions important and the created applications possible to use in practice? In this paper, the answer to these questions using statistical analysis as well as simple machine learning models was given.

Chapter III includes two papers.

Roman Solecki and Anna Mróz from University of National Education Commission in Krakow, Poland, prepared the article titled: **“Relationship with Parents, Symptoms of Depression, and Internet Addiction among Adolescents During the Pandemic Period”**. The research presented in this article aimed to answer the following question: what is the role of social support and quality of family relationships in the context of depressive symptoms and abuse of the Internet during the COVID-19 pandemic and remote learning by adolescents? The study was conducted among 619 adolescents aged 11–15. The survey questionnaire was constructed from standardized research tools. The study showed that 40.0% of the students who took part in the study had increased depressive symptoms. Heavy Internet use affected 16.0% of the respondents, and there was 9.2% of those who had aggravated symptoms of depression and addiction at the same time. Simultaneously, it was noted that girls, compared to boys, were more often found among adolescents experiencing symptoms of depression. The results proved that the quality of family relationships is the most important for the normal functioning of adolescents without depressive symptoms, also in a pandemic situation.

The last article titled: **“E-tutors’ Understanding and Level of Confidence in Using a Technological Pedagogical Knowledge Model in Open Distance E-Learning”** was written by **Mpipo Zipporah Sedio** from University of South Africa, South Africa. The article aimed to investigate the perspectives of e-tutors regarding the importance of Technological Pedagogical Knowledge in an Open Distance e-Learning Institution. The article employs a quantitative survey method to allow students to articulate their impressions of how e-tutors leverage their topic expertise to impart knowledge. The study includes 350 students who are enrolled in a module. Its objective was to gain insights, using quantitative analysis, into the techniques used by e-tutors in delivering content. During the delivery of content, e-tutors provided explanations and support for different viewpoints, taking into

account students' input on the choice, execution, and overall impact of teaching methods. E-tutors recognized the use of Technological Pedagogical Knowledge (TPK) to assist and enhance online student activities. Therefore, it was found that constructivism could help to incorporate the TPK framework, thereby enhancing students' understanding of the instructional design process. However, the study discovered a lack of comprehension among e-tutors regarding the TPK concept in relation to curriculum design.

We hope that studies and solutions in the present IJREL volume will be inspiring and encourage reflection on how to manage the increasing demand for online education in the current situation.

Eugenia Smyrnova-Trybulska
<https://orcid.org/0000-0003-1227-014X>