Proceedings

STRATEGIC INNOVATIONS OF SOCIAL COMMUNICATIONS AND FOREIGN PHILOLOGY IN CRISIS TIMES

I International Scientific and Practical Conference

1 June 2024
Sumy State University, Ukraine

Sumy 2024

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The collection includes scientific materials devoted to current problems in the field of distance teaching and learning in the era of digital technologies, in particular in language pedagogy, media innovations, modern translation, ethnolinguistics, stylistics, methods and methodologies of modern linguistic and literary disciplines. The composition of the collection is scientific research on the preservation of national identity and cultural heritage, intercultural communications, psychological theory and practice, sociological research.

For teachers of higher education institutions, graduate students, students, teachers of secondary schools, gymnasiums, lyceums and colleges, all those interested in socio-humanitarian issues.

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in Chile: the perceptions and practices of in-service EFL teachers. *Journal for Multicultural Education*, 18(1), 25–37, ISSN 2053-535X, https://doi.org/10.1108/JME-08-2023-0073

Rudenko N.V.

ORCID ID 0000-0003-1929-2077

PhD in Journalism

Lecturer of the Department of Foreign Languages and Linguodidactics

Sumy State University

Sumy, Ukraine

Malovana N.V.

ORCID ID 0009-0004-5423-5697

PhD in Philosophy

Associate Professor of the Department of Foreign Languages and Linguodidactics

Sumy State University

Sumy, Ukraine

Pylypenko Y.

Student of Anadolu University

Eskişehir, Turkey

ADVANTAGES OF STEAM EDUCATION IN FOREIGN LANGUAGE ONLINE CLASSES

STEAM is a modern educational model that focuses on practice, encouraging independent learning, research, and creativity. The overall goal of STEAM education is not only to create an understanding of STEAM and the qualities of 21st-century citizens, but also to develop human resources in science, technology, engineering, arts, and mathematics. European countries promote STEAM education through partnership and cooperation programmes. Although STEAM is still at the initial stage of implementation in Ukraine, more and more educational institutions are accepting and adapting STEAM principles in their programmes.

The coronavirus pandemic of 2020 has changed the learning environment, making it necessary to switch to distance learning. Despite challenges related to adaptation and technical skills, this change has opened up new opportunities for implementing STEAM elements in foreign language classes. The availability of free mobile applications, online services, and platforms can be used to create interesting and original lessons on any conversation topic covered by the curriculum.

Since the founder of this educational trend, American professor Georgette Yakman, first used the acronym «STEAM» in the early 21st century, it has become a buzzword in education, even though it is a complex and controversial concept. At the same time, international experts in the field of STEAM education also note that «The STEAM-oriented teaching methodology is based on the use of project-based learning, problem-based learning of natural and mathematical subjects, independent creation of new educational values and practices of cooperation and interaction (including networking) in the context of educational research and artistic developments that illustrate the implementation of scientific information in the process of creating art objects» (Marchenko, 2020). STEAM Education has been conceptualised in different ways: as a movement in search of innovative pedagogical experience, as integrative classroom practices focused on solving real problems, as an integrated approach to learning, as a full-fledged educational model, etc. Regardless of the terminology used, authors interested in STEAM agree on the need to focus teaching and learning on practical projects that allow students to understand, evaluate, and successfully solve technical and scientific issues that arise in everyday life.

Using technology in STEAM education also reduces cognitive load (mental workload and mental effort) and improves students' learning motivation (Costley, 2017). In addition, previous educational research has provided evidence of the effectiveness of STEAM education in student learning (Gao, 2020) and professional development (Shernof, 2017). Currently, the use of artificial intelligence (AI) represents an upward trend in education, as it contributes to the enhancement of students' learning analytics capabilities, which can strengthen their competitiveness in the future labour market (Zawacki-Richter, 2019). To realise the positive impact of

artificial intelligence and introduce gamification into learning design, educators need to teach students how to use AI tools in the classroom to increase their learning interest.

The introduction of STEAM education elements into the process of learning a foreign language with the help of electronic tools and software products makes it possible to develop all the necessary skills: reading (working with the English-language interface and user manuals for devices and software), speaking (discussing the terms of reference, presenting a project as a team, leading a discussion), writing (writing step-by-step instructions, terms of reference, reports, plans, scripts for videos, recipes, and other content), and listening (watching training videos, reading a book, watching a movie, or watching a video). Project tasks also promote the development of analytical and critical thinking, creative design, and problem-solving skills, and encourage creativity and collaboration by finding ways to implement their own ideas in solving technical problems, thus giving students a sense of self-efficacy, confidence, and motivation for technoscientific learning. This modern pedagogical approach inspires students to mobilise all resources to solve a complex problem situation, guides them through science, technology, and art, and aims to develop personal competences and qualities. At the same time, STEAM also gives students an active, constructive, and critical role in their learning and promotes collaboration, while the teacher takes on the role of advisor, consultant, and/or guide.

Having improved their foreign language skills and the ability to work with modern available software, students will be able to access publicly available global platforms to organise international projects and research activities. Therefore, STEAM is a new vision for promoting student creativity, and collaboration through transdisciplinary awareness, and achieving integrative and holistic education. A pedagogical approach that integrates knowledge and experience across disciplines will help Ukrainian students become successful professionals in the future, making our country's economy more innovative and competitive. STEAM education can be seen as an appropriate solution for national education reform on the way to developing a national position in the era of globalised competition.

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Martynyuk O.V.

ORCID: https://orcid.org/0000-0002-8973-5876

PhD in Pedagogy, Associate Professor

Department of Foreign Language Education and Intercultural Communication

Khmelnytskyi National University

Khmelnytskyi, Ukraine

APPLYING THE POTENTIAL OF ARTIFICIAL INTELLIGENCE IN FOREIGN LANGUAGE ACQUISITION

In the contemporary technological age, the development of Artificial Intelligence