



EDITORIAL

JESMAC: The Next Phase in Our Mission for Educational Excellence

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The Journal of Educational Studies in Mathematics and Computer Science (JESMAC) marks a milestone in our efforts to advance the understanding and practice of teaching mathematics and computer science. As a fresh contribution to the academic community, we are excited to launch this journal to foster innovation and collaboration in the field of educational studies and research in Mathematics and Computer Science.

The Faculty of Science has a tradition of 52 years of training teachers of mathematics, computer science, and natural sciences (biology, physics, and chemistry). Over the years, we have enhanced our study programs to address the educational system's evolving demands and foster essential competencies in teachers, including scientific-professional, psychological-pedagogical, and subject-methodological competencies. In terms of the education of mathematics and computer science teachers in the Department of Mathematics and Informatics, this process has been significantly accelerated and intensified over the past 25 years, especially in the area of innovations in the methodology of teaching mathematics and computer science, as well as in increasing the scope and share of these subjects in the curriculum for those students who choose the teaching modules. At the same time, more teachers and associates from the Department of Mathematics and Informatics have decided to focus part of their research interests on the topics of subject didactics, thus actively contributing at a scientific level to a better understanding of problems in the teaching of mathematics and computer science at all educational levels, as well as offering concrete solutions for implementation in teaching practice.

As a natural course of action, the Faculty of Science has taken two significant steps in positioning itself as a scientific research institution actively engaged in the research of mathematics and computer science teaching in 2024:

- We have organised a scientific conference, The First Conference on Mathematics and Computer Science Teaching, TEMATCOM 2024, held on August 29-30 in Kragujevac (<https://imi.pmf.kg.ac.rs/TEMATCOM2024/index-en.php>), and
- We have established a new scientific journal, the Journal of Educational Studies in Mathematics and Computer Science (JESMAC) (<https://imi.pmf.kg.ac.rs/jesmac/home>).

At the TEMATCOM 2024 conference, nearly 100 participants from Serbia, region and beyond gathered in two sections: Research in teaching mathematics and computer science and School practice – yesterday, today, and tomorrow. They had the opportunity to exchange scientific and professional results, seeking answers to numerous questions about modern mathematics and computer science teaching. The actual theme of the conference has been illuminated from various angles through numerous presentations, and based on the research presented, specific recommendations for improving the teaching process have been proposed. The attendees absolutely supported the idea that the TEMATCOM conference should become a tradition, thus serving as a form of continuous exchange of scientific and professional knowledge about teaching mathematics and computer science. During the discussion, it was concluded that providing more space,

opportunities, and channels for communication among all stakeholders in education, especially concerning significant reforms in the educational system and strategic issues, is necessary. Although each level of education has its specificities and local problems and opportunities, which will be sectorally analysed, it was emphasised that strengthening their cooperation on everyday issues is essential. The organisers are particularly pleased that many participants highlighted that one of the conference's dominant impressions was the warm, relaxed, yet productive and effective atmosphere created during the event.

The quality of the presented papers and the accumulated positive energy from the conference further solidified and strengthened our efforts to establish a new serial publication (an open-access scientific journal without publication fees) of the Faculty of Science: The Journal of Educational Studies in Mathematics and Computer Science (JESMAC). The journal's inaugural issue features selected manuscripts presented at the TEMATCOM 2024 conference, which can be regarded as the proceedings of that event. JESMAC aspires to sustain and expand the intellectual exchange initiated at TEMATCOM 2024, acting as a continuous repository of knowledge and collaboration.

The journal's primary goal is to serve as a platform for researchers, educators, and practitioners to share and access high-quality research in mathematical and computer science education. We encourage interdisciplinary collaboration among scholars, mainly from STEM fields, to promote innovative, evidence-based teaching, learning, and assessment practices. Additionally, the journal seeks to explore the historical development of mathematical concepts and teaching methods, examining their relevance to contemporary education. We also aspire to enhance our understanding of mathematics and computer science's cultural, social, and philosophical aspects, highlighting their significant impact on educational practices and societal progress. The journal invites various submissions, including original research articles, review papers, case studies, and theoretical papers, that significantly contribute to advancing knowledge and practice in mathematical and computer science education. On a scientific basis, we want to influence the development of effective educational policies and strategies, as well as the implementation of practical teaching solutions. Our efforts are intended to enhance individuals' knowledge and attitudes, ultimately contributing to the overall advancement of society.

The journal's scope covers a wide range of topics, including curriculum development, instructional strategies, educational technologies, assessment methods, teacher professional development, and student learning outcomes in mathematics and computer science education. It emphasises interdisciplinary connections, welcoming submissions that examine the intersections of these fields with physics, chemistry, biology, psychology, pedagogy, sociology, and neurology to encourage holistic educational insights. We also encourage contributions that link historical mathematical practices with current academic theories and instructional models to enhance contemporary teaching methods. Additionally, the journal invites research exploring how historical narratives and artefacts can boost student engagement and understanding in math education. Committed to inclusivity and impact, the journal aims to engage a diverse audience of researchers, educators, and policymakers dedicated to improving the quality and effectiveness of education in these disciplines.

JESMAC invites submissions of original research, case studies, and theoretical papers that address curriculum development, instructional strategies, technology integration, and more. Innovative approaches and interdisciplinary perspectives to improve mathematics and computer science educational outcomes are welcomed.

We look forward to your contributions; join us in shaping the future of mathematics and computer science education by contributing to JESMAC and participating in the ongoing dialogue.