

Editorial

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It is with great pleasure that we present the first issue of volume 27 of the journal *Educação Matemática Pesquisa*, marking the beginning of another cycle of the dissemination of research that reflects the vitality and diversity of the field of mathematics education. This issue brings together 13 articles that address contemporary themes, from epistemological foundations to innovative pedagogical practices, including reflections on teacher education, digital technologies, and social inclusion. Each contribution highlights the journal's commitment to promoting dialogues that strengthen research and educational practice, showing its dedication to producing relevant and transformative knowledge.

Opening this edition, the article “Proposal for an expanded reference epistemological model for teaching mathematics,” by Teodora Pinheiro Figueroa and Saddo Ag Almouloud, aims to propose a theoretical-methodological model (EREM) based on the anthropological theory of didactics, integrating mathematical and pedagogical knowledge. The authors conclude that the EREM expands discussions on pedagogical practices, highlighting the importance of personal and institutional relationships in teaching.

In “I am not a child, I am an adult: Fantasy of the real, reiteration, and numeracy practices,” Raquel Monteiro Pires de Lima and Maria da Conceição Ferreira Reis Fonseca analyze how three and four-year-old children appropriate mathematical practices in sociodramatic games. The study reveals that fantasy and reiteration are fundamental to constructing mathematical meanings, highlighting the importance of valuing children's cultures in teaching.

The article “The relationships between creativity and work with digital technologies that are revealed in the literature on mathematics education,” by Priscila Gleden Novaes da

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Silva, Rodolfo Eduardo Vertuan, and Clodis Boscarioli, investigates how digital technologies can foster creativity in mathematics teaching. The authors identify that exploration, collaboration, and pedagogical innovation are key elements for creative development, pointing out gaps in research on teaching creativity with technologies.

Marlon Augusto das Chagas Barros and Paulo Vilhena da Silva, in “Contributions of a linguistic approach in the initial education of mathematics teachers,” examine the impacts of a mini-course on mathematical language in the education process of teaching degree students. The results show that the linguistic approach helps identify didactic challenges and reflect on the nature of mathematical knowledge, thereby reinforcing its relevance in teacher education.

In the article “Mathematical modeling: A study on its incorporation into basic education based on the proceedings of the SIPEM,” Sara Martins Bessa, Francisco Wagner Soares Oliveira, and Otávio Floriano Paulino analyze the presence of mathematical modeling in basic education through academic productions. The authors conclude modeling transforms real problems into meaningful mathematical activities, promoting dynamic and investigative learning environments.

In the article “Implications of mathematical knowledge for teaching through mathematical modeling: A look at discussions among teachers in continuing education,” Karina Alessandra Pessoa da Silva and Emerson Tortola investigate how mathematical knowledge for teaching emerges in discussions about modeling. The results highlight the importance of collaboration between teachers and the teacher educator’s mediation to improve pedagogical practices.

Rosana Maria Luvezute Kripka and Alessandro Jacques Ribeiro review studies of the self-study type in mathematics education in “Teachers and research into their own practice: A systematic literature review.” The research points to the need for further research into continuing education and teacher noticing, emphasizing reflection and cooperation as central elements in professional development.

“Contributions of a teaching organization for linear systems through problem solving in the 2nd grade of high school,” by João Alessandro da Luz and Marcelo Carlos de Proença, evaluates a teaching proposal based on problem solving. The authors conclude that the approach favors conceptual and algorithmic understanding, although students still struggle with monitoring and execution stages.

Marcelo de Oliveira Dias, in “Ten years of the Curriculum and Digital Technologies in Mathematics Education group: Research paths in/for teacher education,” outlines an overview of the CTDEM (Currículo e Tecnologias Digitais em Educação Matemática) group’s research,

highlighting contributions such as the production of educational materials and the integration between technology and teacher education. The study points to future directions, including research on generative artificial intelligence in mathematics education.

In “The specialized knowledge of the teacher who teaches mathematics to prospective teachers of the initial years,” Bruna Carolina Mascotte, João Alessandro da Luz, and Luiz Otavio Rodrigues Mendes analyze the pedagogical-mathematical knowledge of the pedagogy teaching degree students. The results reveal gaps in their understanding of concepts such as divisibility, indicating a need to enhance graduates’ mathematical education.

Marta Cristina Cezar Pozzobon, Adriana Richit, and Mauri Luís Tomkelski, in the article “Didactic knowledge of mathematics teachers in lesson study: Student difficulties and teaching strategies,” discuss how lesson study promotes the development of didactic knowledge. The research shows that collaboration between teachers expands the repertoire of strategies and the understanding of students’ difficulties.

Jorge Fernandes de Lima Neto and Tiago Emanuel Klüber, in “Understanding derivative concepts by mathematics teaching degree students from three inland institutions in the state of Paraná,” investigate the gaps in learning derivatives. The study reveals significant gaps in undergraduates’ understanding, indicating the need to review the formative processes.

Closing this edition, the article “The use of mathematics and statistics in scientific disinformation discourses in a denialist virtual community,” by Gabriela Fasolo Pivaró, Steve da Silva Vicentim, and Gildo Giroto Júnior, analyzes how mathematical concepts are distorted in denialist discourses. The authors defend mathematical and statistical literacy as essential tools for critically analyzing information and proposing educational strategies to combat misinformation.

This edition reaffirms the engagement of the journal *Educação Matemática Pesquisa* in disseminating research that addresses contemporary challenges in mathematics education. The articles published here aim to expand academic knowledge and support the transformation of pedagogical practices and educational policies. We thank the authors, reviewers, and readers for their continued contributions, hoping that this issue inspires new reflections and actions toward more critical, inclusive, and innovative mathematics education.