**Editorial**

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We are happy to offer our readers the second 2024 *Educação Matemática Pesquisa* journal issue. This year, we are editing volume 26, sharing the results of scientific research in mathematics education.

The articles published in this second issue of volume 26 disseminate results from scientific studies by researchers from different regions of Brazil and other countries, revealing varied national and international research groups and institutions. Moreover, the articles published in this issue bring plural theoretical and methodological references that strengthen scientific research in mathematics education.

Issue 26.2 presents nine articles on inclusive mathematics education, logic, geometry, combinatorics, digital technologies, anthropological theory of didactics, active methodologies, and mathematical knowledge for teaching. We also published an article by Nicolas Balacheff, translated by Saddo Ag Almouloud.

Below, we present concisely the texts in this second 2024 issue of *Educação Matemática Pesquisa* journal.

The first article, "Actor-network theory and mathematics education: Translating inscriptions associated with mathematical knowledge for teaching," is authored by Diego Góes Almeida and Flávia Cristina de Macêdo Santana. The study is a theoretical reflection on how some concepts of the actor-network theory (ANT) developed by Bruno Latour and collaborators contribute to discussing the relationship between humans and non-humans in the context of mathematical knowledge for teaching (MKT). The authors conclude that humans and non-humans can develop inscription procedures and create parameters that allow the ordering of different mathematical relations that stabilize sociotechnical networks and form an increasing number of heterogeneous aggregates and allies.

The article "Digital technologies in geometry teaching: A systematic literature review" is authored by Maria Raiane da Silva and Vinícius Pazuch. The authors investigated the

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integration of digital technologies in geometry teaching and pointed out teachers' difficulties in using technologies and their absence in school environments. The authors show that digital technologies allow diverse and dynamic approaches, with emphasis on dynamic geometry software.

The third article, by Jurema Lindote Botelho Peixoto and Vera Lucia Merlini, is called "The schemes of deaf students in a combinatorial situation." The authors analyzed action schemes of two young deaf students in combinatorial situations, based on the scheme construct of Gérard Vergnaud's theory of conceptual fields, in Brazilian sign language (Libras) and the communicative and cognitive potential of gestures, based on a microgenetic analysis associated with videography. The conclusions indicate that we must develop statements of problem situations in Portuguese and Libras, considering each deaf student's linguistic competence.

The article "Calling for the introduction of distorting transformations in secondary education curricula in Senegal: The case of inversion" is authored by Thiendou Diack, El hadji Malick Dia, and Cissé Ba. The authors experimented with and analyzed activities to introduce inverse geometry in the classroom. They also surveyed teachers about the place distorted transformations occupy in mathematics teaching in Senegal.

The fifth article, "Investigative action methodologies for the sciences of the imprecise," is authored by Iran Abreu Mendes. The author discusses philosophical and methodological principles on uncertainties in the exact, natural, and human sciences, stated by a group of authors who, in the 1964s, pointed out reflections on research in the field of imprecise sciences to react against scientific certainties and a precise image of science established between the 19th and 20th centuries that strengthened prejudices against the imprecise.

Marcel Messias Gonçalves, Alessandro Jacques Ribeiro, and Márcia Aguiar are the authors of the article "Guiding principles for investigating one's own practice: A model for basic education teachers." The authors discuss a model of guiding principles for elementary school teachers to conduct research in their own classrooms. They use the model to analyze episodes of the practice of a teacher-researcher who proposed to carry out investigations in his practice, adopting exploratory teaching in his classes and examining the concept of symmetry to articulate algebra and geometry in a 9th-grade class at a public school on the coast of the state of São Paulo.

Roger Minks and Rafael Montoito author the seventh article: "Notes on logic based on the pamphlet "Some popular fallacies about vivisection" by Lewis Carroll: Approximations between mathematics and literature." The study aims to promote greater integration between literature and research in mathematics education. To this end, they exemplify how classical logic can be used as an alternative approach to interpreting Carroll's work, thus demonstrating a possible intersection between mathematics and literature.

The article "The question and answer map as an alternative model for writing a doctoral thesis" is authored by Kleber Gonçalves and Marilena Bittar. The study discusses a coherent and insubordinate model for the alternative writing of a doctoral thesis using the question-and-answer map developed within the scope of the anthropological theory of the didactic. The analyses helped finalize the reference epistemological model and the teaching proposal initiated with the study group members.

The ninth article entitled "Problem-based learning in statistics education: a comparative and reflective analysis", written by Mateus Augusto Ferreira Garcia Domingues and Guataçara dos Santos Junior, aims to carry out a comparative analysis of the methodology of active problem-based learning and the traditional teaching method. This theoretical essay was produced to discuss the characteristics of problem-based learning for statistics teaching, as well as its advantages over the traditional teaching method.

The article "Updating and production in mathematics education: an account of inventions from the encounter between future pedagogues and the act of defining space" was written by João Carlos Pereira de Moraes. The aim of the study is to track how processes of reflection on the act of defining space with pedagogy students come into play in the composition of ways of thinking about the teaching of mathematics. A device has therefore been developed to provoke the production of thought.

The eleventh article, "A potentially meaningful teaching unit mediated by the flipped classroom for teaching polyhedra," authored by Adriana Pereira da Silva, presents an investigation that evaluates the possibilities of applying a potentially significant teaching unit (PSTU) on polyhedrons in a high school class, based on the methodological work carried out by the active methodology of the flipped classroom. The author concludes that there were important advances in student learning, highlighting engagement, protagonism, autonomy, and students' understanding of the topic, but there were challenges, such as limited Internet access.

The last article, by Nicolas Balacheff, "Situations for learning proof in mathematics: State of the research and open questions," was translated by Saddo Ag Almouloud to be published in this issue. This text complements the lectures presented at the National Seminar on Mathematics Didactics in 2017 and CORFEM in 2019, which aimed to learn and teach proof before its introduction as a canonical form of proof in mathematics. The conclusion focuses on the questions raised by the need for specific situational engineering to encourage and monitor the genesis and recognition of proof patterns in the mathematics classroom before explicit proof teaching.