Guest Editorial: Brazilian research in Mathematics Education – more to know

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This issue of TME (volume 19, issue 2) continues the publication of research reports from the Brazilian Mathematics Education community. Previously, two issues were already published (volume 18, issue 3; volume 19, issue 1). Now we added eleven more papers presenting cutting-edge results. When we consider the three issues, there are thirty-three articles in total, which offer a broad and profound perspective of the research in Mathematics Education conducted in Brazil.

In this issue, the eleven articles are written by colleagues belonging to research groups in the points shown in Figure 1 below.

![Figure 1: Locations of the authors of TME papers in the vol. 19, no. 2.](image-url)
The first article is by Marilena Bittar. It is entitled *A methodological proposal for textbook analysis*. The author outlined a model for textbook analysis based on aspects of the Anthropological Theory of the Didactic.

Next, Lilian Aragão da Silva and Andreia Maria Pereira de Oliveira focus on power relations in a practice community of mathematics teachers and scholars. The paper is entitled *Power relations and the negotiation of meanings in a community of practice in the field of mathematics education*.

In the paper *Ethnomathematics Approach as a Tool for Cultural Valuation and Social Representativity: Possibilities in a Quilombola Community in the State of Amapá - Brazil*, Romaro Antonio Silva, Pedro Manuel Baptista Palhares, and José Roberto Roberto Linhares de Mattos present an ethnomathematics study about women's craftwork with ceramics in a *quilombola* community (Afro-Brazilian settlement first established by escaped people that were slaved).

Next, in the article *Agency and criticality in statistics teaching practices: the account of a teacher*, Celi Espasandin Lopes and Nathalia Tornisiello Scarlassari were aimed at practices and conceptions of a mathematics teacher while teaching statistics and probability. The research was biographical, and the authors focused on the concept of agency to carry on their analysis.

In the following paper, Thiago Donda Rodrigues, Fernanda Malinosky Coelho da Rosa, and Alan Pereira Manoel explore culture, normality, and difference issues in the school mathematics context. With the title *Exclusion and inclusion processes in Mathematics classrooms - reflections on difference, normality and cultural issues within three different contexts*, the authors put in question the exclusion operated against special students belonging to three groups: students with special needs, Afro-Brazilians, and the indigenous.

Next, Niusarte Virgínia Pinheiro and Samira Zaidan analyzed pre-service mathematics teachers' perceptions of the evaluation practices of their educators. Entitled *Learning Evaluation in Mathematics Teaching Degree and the Possible Implications for Teacher Training*, the study suggests that these evaluation modes are likely meant to be part of the teachers' future practices.
In the article *Spaces, movements and topological notions, what do the babies' cartographies show?*, Jenny Patricia Acevedo-Rincón and Gabriela Guarneri de Campos Tebet focus on topological notions of closure, proximity separation and projections in the babies space. The authors show that important mathematical notions are developed since the early days of life.

In the article *The Anthropological Theory of the Didactic in Brazilian researches*, the authors focused on the current appropriation of the Anthropological Theory of Didactic in Brazilian Ph.D. dissertations. The authors Sueli dos Prazeres Santos and Luiz Márcio Santos Farias categorize the corpus in three groups according to the dissertation focus: teaching, learning, and analysis of documents.

Next, in the paper *The Man Creates Instruments that Transform Himself - An Overview of GERE Research within Mathematics Education*, Verônica Gitirana, Rosilângela Lucena, Rogério Ignácio, Roberto Araújo Filho, José Wilson Pereira, and César Thiago da Silva summarize their research group's studies in three lines – teaching, teacher education and identity -, offering a view on their contribution to the mathematics education field.

Following, Lúcia Cristina Silveira Monteiro approaches mathematics as semiotic activity in the article *Semiosis to Communicate Mathematics: Complementarity in the Circularity of Interpretations in Mathematics for the Development of Creativity*. She based her analysis on interpretations of Zero's aporias.

Moreover, the last article of this issue is by Roberto Araújo Filho and Verônica Gitirana, with the article *Pre-service Teachers' Knowledge- Analysis of teachers' education situation based on TPACK*. Here, the authors focus on the knowledge that emerges from collaborative situations in an initial teachers' education with integration of digital technology for teaching function, aiming to emerge Technological, Pedagogical and Content Knowledge (TPACK) in pre-service teachers.

These eleven articles bring themes not covered in the previous issues and complete an overview of the vigor and diversity of Brazilian research in Mathematics Education. Therefore, I invite the
reader to browse the articles in this issue and the two previous ones so that the studies presented in this series can trigger new possibilities for academic debate.

I thank all authors who shared their investigations into these three special issues (vol. 18, issue 3; vol. 19, issue 1; vol. 19, issue 2). I give special thanks to the editor in chief of the journal, Professor Bharath Srirman, for providing us with this unique opportunity.