

## Editorial

The Postgraduate Studies Programme in Mathematics Education at PUC-SP annually holds the Student Production Meeting of Postgraduate Programs in Mathematics Education and Related Areas, in which students from the Institution and other universities present their developing or recently completed master's and doctorate's research. A few years ago, a strategy was adopted consisting of selecting the best evaluated articles by the event's reviewers (the Program's doctoral students and their supervisors) for publication in this Journal of Student Production in Mathematics Education. Regarding the ninth edition of the Meeting, which took place in 2021, 19 articles were selected for publication.

Ten of these works were published in the June 2022 issue of this Journal and the remaining 09 set up the present edition. Two investigations are characterized as mappings or literature reviews.

Silva and Bianchini, in *Panorama of national and international thesis related to Algebraic Thought in the period between 2010 and 2019*, based on the analysis of the thesis produced in Brazil (fifteen), Spain (six), United States (six) and Portugal (nine), carried out an inventory on the subject, delimiting gaps and trends in the area, to contribute to the conduction of new studies.

In *Assessment of learning and the finding of student error regarding the positional value of a digit in a number: a literature review*, Freitas and Oliveira analyze Brazilian dissertations and thesis, defended between 2010 and 2019, intending to identify, in these productions, aspects related to the teachers' perceptions about mistakes made by students regarding the place value of a digit in a number in the decimal number system.

In two articles that make up this issue, discussions are presented on the resources used by teachers in their classes, from the perspective of the Documentational Approach to Didactics, which is a theory developed by the French researcher Luc Trouche and his collaborators.

Christo and Iglori, in *The transformation of resource systems into documents in the process of teaching the concept of limit*, present some elements that support the research they are developing with the general objective of studying the transformation of resources mobilized by university professors into documents, during the process of teaching the concept of limit, which has the specific objective of developing a joint action between researcher and professors during the process of transforming the resources mobilized by these educators into documents in the process of teaching the concept of limit.

In the research *Analysis of an activity in the context of a remote collaborative work for the teaching of Compound Interest*, Almeida and Abar present the description and analysis of one of the activities developed by two high school Mathematics teachers in a remote collaborative work for the teaching of Compound Interest, articulated with the GeoGebra software, under the theoretical perspective of the Documentational Approach to Didactics.

Antunes and Manrique, in the article *Mathematics Anxiety*, present some results of the literature review on the subject, carried out based on dissertations and thesis defended between 1976 and 2020, which will subsidize the deliberations to be carried out in the research in development whose objectives are: to investigate, through teacher training, how participants observe the patterns of behavioral risks to mathematics anxiety in the classroom and, consequently, to analyze the activities developed by these teachers in order to examine the elements of the Flow Theory and how these activities can be beneficial to students who show such patterns.

In the research entitled *The Activity Theory as a theoretical framework in research on teaching of academic content in the inclusive educational context*, the authors Takinaga and Manrique, aiming to obtain a deeper understanding of the Activity Theory, present how it has guided the studies that investigate the teaching of academic content in an inclusive educational context.

Flores and Bianchini, in the article *The initial training of mathematics teachers in the contemporary Brazil: a study based on INEP data*, present and discuss data on the subject, from 2010 to 2019, based on results from the National Institute of Studies and Educational Research Anísio Teixeira (INEP), aiming to understand where and how this

training has taken place and what the graduates of these courses think about the exercise of teaching.

In the article whose title is *Intervention of Vergnaud's Theory of Conceptual Fields: a contribution to the discipline of Analytic Geometry with students of the first year of the Mathematics course at the Escola Superior Pedagógica do Bié*, Cassela and Manrique present a description of the conceptual study of conics in an approach related to Vergnaud's Theory of Conceptual Fields, a characterization of the current status of the discipline of Analytic Geometry, in the Mathematics course at the *Escola Superior Pedagógica do Bié*, in Angola, with particular attention to the study of the mathematical object already mentioned and, finally, some results of the implementation, with students of the Mathematics course at the aforementioned School, of activities created in the Geometry Teaching Laboratory of the Federal Fluminense University, in Brazil.

Finally, in the last article of this issue, entitled *An approach from the perspective of the Theory of Structural Cognitive Modifiability and the Mediated Learning Experience through the use of Artificial Intelligence*, Felício and Lima discuss the use of Artificial Intelligence to enhance the students learning process, questioning the classroom model, according to which the student needs to adapt himself to the curriculum instead of working in this environment taking into account the student's needs.

We thank the student of the Program, Isabelle Coelho da Silva, for the work of editing this issue and we hope that the readers appreciate the discussions presented and that these can inspire them and contribute to the expansion of their knowledge repertoires.

Enjoy your reading.

Barbara Lutaif Bianchini - Editor

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