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GT19 Trajectory and research focus at ANPEd: analysis of commissioned works and short-courses

Trayectoria y ejes investigativos de la investigación en el GT19 de la ANPEd: Un Análisis de los trabajos por encargo y de los minicursos

Trajectoire et axes de recherche du GT19 de l'ANPEd: une analyse des travaux commandés et des mini-cours

Trajetória e focos investigativos da pesquisa no GT19 da ANPEd: uma análise dos trabalhos encomendados e dos minicursos

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Abstract

The current article introduces a historical overview of GT19 – Mathematics Education, which was launched in 1999 during the 22nd annual ANPEd⁴ meeting, and highlights its key role as space for scientific debate and production in the Mathematics Education field. Over its 25 years of existence, GT19 has become a prominent forum for researchers, educators and postgraduate students by fostering the exchange of ideas and by setting dialogue among different Mathematics Education strands, as well as with other Education fields. The aim of the current article is to address the collective memory built through its meetings, academic production and activity reports by pointing out GT19's contribution to research outspread in Mathematics

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Education. Most of all, the article is an analysis of core topics prioritized in Commissioned Works and Short-courses, with emphasis on research to guide these activities.

Keywords: GT19, Mathematics Education, Research, Commissioned Work, Short Course.

Resumen

Este artículo ofrece un panorama histórico del GT19 – Educación Matemática, creado en 1999 en el marco del 22.º encuentro anual de la ANPEd, destacando su papel fundamental como espacio de discusión y producción científica en el campo de la Educación Matemática. A lo largo de sus 25 años de existencia, el GT19 se ha consolidado como un foro relevante para investigadores, docentes y estudiantes de posgrado, promoviendo el intercambio de ideas y articulando diversas corrientes de la Educación Matemática en diálogo con otras áreas del campo educativo. El artículo se propone abordar la memoria colectiva construida a lo largo de las reuniones, de la producción del GT19 y de sus informes de actividades, subrayando y acompañando su contribución a la difusión de la investigación en Educación Matemática. En particular, se realizó un análisis de las temáticas priorizadas en los trabajos por encargo y en los minicursos, destacando los focos de investigación que orientaron dichas actividades.

Palabras clave: GT19, Educación Matemática, Investigación, Trabajo por encargo, Minicurso.

Résumé

Cet article propose un aperçu historique du GT19 – Éducation Mathématique, créé en 1999 lors de la 22e réunion annuelle de l'ANPEd, en soulignant son rôle fondamental en tant qu'espace de discussion et de production scientifique dans le domaine de l'Éducation Mathématique. Au cours de ses 25 années d'existence, le GT19 s'est affirmé comme un forum important pour les chercheurs, les enseignants et les étudiants de troisième cycle, favorisant l'échange d'idées et l'articulation entre différentes approches de l'Éducation Mathématique, en dialogue avec d'autres domaines de l'éducation. L'article vise à explorer la mémoire collective construite à travers les réunions, les productions du GT19 et ses rapports d'activités, en mettant en lumière sa contribution à la diffusion de la recherche en Éducation Mathématique. Plus spécifiquement, une analyse a été menée sur les thématiques prioritaires des travaux commandés et des minicours, en soulignant les axes de recherche impliqués dans ces initiatives.

Mots-clés: GT19, Éducation Mathématique, Recherche, Travail commandé, Minicours.

Resumo

Este artigo traz um panorama histórico do GT19 - Educação Matemática, criado em 1999 na 22.ª reunião anual da ANPEd, destacando seu papel fundamental como espaço de discussão e produção científica em Educação Matemática. Ao longo de seus 25 anos de existência, o GT19 se consolidou como um importante fórum para pesquisadores, professores e estudantes de pósgraduação, promovendo a troca de ideias e a articulação entre diferentes vertentes da Educação Matemática, em diálogo e debate com outras áreas da Educação. O artigo visa abordar a memória coletiva construída ao longo das reuniões, da produção do GT19, e dos relatórios de atividades, ressaltando e acompanhando sua contribuição para a difusão da pesquisa em Educação Matemática. Especificamente, traçou-se uma análise das temáticas priorizadas nos trabalhos encomendados e nos minicursos, ressaltando os focos de investigação envolvidos nessas atividades.

Palavras-chave: GT19, Educação Matemática, Pesquisa, Trabalho Encomendado. Minicurso.

25 Years of GT19: Mathematics Education at ANPED

This article is part of the GT19's 25th anniversary celebrations – Mathematics Education at ANPEd. It provides a historical overview of this group by addressing its origins, motivations and consolidation as forum for debate and scientific production in the Mathematics Education field. Reports on the group's activities and information provided by its former coordinators, including its first managers and those responsible for the group's discussions and proposed initiatives, were the main data source for the manuscript's writings about the GT19 background. The group was launched in 1997 as Study Group (SG) and it reached is status as Working Group (WG) in 1999. GT19 undertaken aimed its development and enhancement over its 25 years of activity. Thus, by revisiting this trajectory, its achievements and faced challenges were not just celebrated, but propositions on building a collective memory, based on its founders and former coordinators voices and on what has been produced by it over the years, with emphasis on monitoring CT19 contribution as space for the outspreading of research in Mathematics Education and for qualification on research in this specific field, were also on the mainstream. Over the process to write this article, the target was on a more detailed analysis of the Short-courses and Commissioned Works' topics. The text is organized into two sections, in addition to the current introduction. The next section describes GT19's creation process and provides a discussion about the aforementioned topics.

The association between Mathematics Education and postgraduate programs in Education, and the motivations driving GT19 creation

Scientific societies' implementation is nothing new in Brazil. Since the 18th century, these organizations have gathered both amateurs and professionals from several fields. Many of these organizations focus science, literature and professional groups like doctors, teachers, merchants and artists, among others. They drive "the creation of sciences themselves and of professions based on them, [besides] preserving their history, outspreading their knowledge and creating conditions for scientific and professional development" (Bueno, 2022, p.1).

From the late 19th century onward, as Jesus (2007) pointed out, it was mandatory to get a license from the police station located close to the place where the members wished to meet in order to launch an association, whether scientific, religious, cultural, recreational, professional, for sports, or even class or charity associations. This demands ensured that measures were taken so that "the meeting [would] take place based on the established order" (Jesus, 2007, p. 145). Thus, interested parties could organize meetings, draw up statutes and launch associations, guilds, clubs or brotherhoods.

Currently, police licensing is no longer required, but it is still necessary to have discussion about, and struggle for, the right to give voice to these spaces and to be represented by them in some instances whose doors remain closed. Over the last decades, postgraduate programs became a necessary tool for the academic community when it comes to expanding research production. It is worth highlighting that scientific associations also played key role in this movement. Universities opened new pathways for discussions and debates on a wide variety of subjects and knowledge fields after their launching at early 20th century.

According to Ferraro (2005), the National Association of Postgraduate Programs and Research in Education (ANPEd) are tight to two different, although closely related, fields of interest, namely: postgraduate programs in Education, and knowledge production and outspread, in this same field. The aforementioned authors stated that the order of the terms "postgraduate" and "research" in the association's name reflects the process mostly driving the establishment of Brazil's postgraduate education. Ferraro (2005) also pointed out that, before emerging from a consolidated research practice, postgraduate programs were created to explicitly promote research development in the still fledgling Brazilian universities. Indeed, the creation of postgraduate programs represented the almost simultaneous institutionalization of qualification and research production. This particular scenario turned the attentions to postgraduate programs as privileged sites for research in the country.

ANPEd, which was launched in 1979, followed the development of the first Brazilian postgraduate programs when the Education sector already counted on 29 postraduate programs, including 25 Master's and 4 Doctoral programs (Brandão, 1986, as reported by Ferraro, 2005, p. 51). The foundation meeting happened in Rio de Janeiro and it was organized by the Institute of Advanced Studies in Education (IESAE/FGV); the meeting counted on major support from CAPES. Professors, coordinators and postgraduate students attended the meeting. The association defined its work format, scientific statute, location, frequency, the thematic focus of each meeting, as well as papers' presentation format and other general regulations over the course of subsequent meetings.

It was only in 1981, at its 4th Annual Meeting, that the association decided to organize working groups (WGs) based on the meetings' core topics. Initially, there were eight groups: Primary Education, Secondary Education, Higher Education, Popular Education, Education and Work, Education and Language, Rural Education and Preschool Education (Calazans, 1995). WGs' identification was closer related to schooling level and modalities than to discipline fields. This scenario would take long to change and to welcome other groups with more specific demands (not without resistance) such as the Mathematics Education WG (*GT*), which would

be the 19th WG to be launched. ANPEd counted on 24 WGs and three SGs⁵ in the first half of 2025.

Sonia Igliori addressed GT19 and pointed out that the "creation of a working group within a national association the size of ANPEd, which brings together research in a given knowledge field, presupposes, above all, this field's acknowledgement by the academia" (Miguel et al., 2004, p. 73). According to Fiorentini (1994), Brazilian Mathematics Education-related research, from the 1970s onwards, and the implementation of postgraduate programs, would mostly take place in universities within *stricto sensu* postgraduate programs in Education. In her thesis "Directions of Brazilian research in mathematics education: the case of scientific production in postgraduate courses" (1994) she identified that Education Schools accounted for the vast majority of Mathematics Education-related productions, and it means 62.6% of research carried out between 1970 and 1980.

Further progress in scientific production fields has been achieved since the first postgraduate program in Mathematics Education was launched in Brazil, mainly after the Master's degree was implemented as Postgraduate Program in Mathematics Education, in 1984, at State University of São Paulo (UNESP), Rio Claro campus, which encompassed fields focused on Mathematics Teaching and on the Fundamentals of Mathematics (Nardi & Gonçalves, 2014, cited by González et al., 2023). Other programs were created, and

throughout the country, the organization of research centers in Mathematics Education [held] in postgraduate programs in Education was growing, in addition to the consolidation of specific postgraduate programs in Mathematics Education such as those at UNESP Rio Claro and PUC-SP (Miguel et al., 2004, p. 74).

Postgraduate programs in Mathematics Education in Brazil are closely linked to CAPES' Education field. Furthermore, the active participation of these programs' members in the annual ANPEd meetings have driven their interest in creating a dedicated group in the field. "This would not mean isolating or separating other WGs that also introduce relevant discussions to mathematics educators in their scientific work, but rather strengthening a group with its own goals" (Nobre cited by Miguel et al., 2004, p. 79).

According to Maria Tereza Carneiro Soares (UFPR), the proposition for GT19 creation, among other reasons, emerged from the will to better understand SBEM members who had already attended ANPED meetings,

⁵ For further information: https://anped.org.br/gt/. Accessed in Februry 2025

[...] the need [for] and possibility of establishing a specific forum to discuss research in Mathematics Education, in an annual meeting that was under construction... the largest forum to discuss research developed in Brazilian Postgraduate Programs in Education, since research in Mathematics Education was developed in Postgraduate Programs linked to the Education field (Miguel et al., 2004, p. 79)

Furthermore, it was

consensus, among coordinators who had Mathematics Education as the only research field in their Programs, the relevance of having a forum aimed at prioritizing the discussion on research in Mathematics Education (an old demand of SBEM⁶ members, since the ENEM did not focus on it) in the construction of this knowledge field within a meeting recognized as research meeting, as the case of ANPED (Miguel et al., 2004, p. 79).

It is worth pointing out that the First International Seminar on Research in Mathematics Education (I SIPEM) by SBEM only took place in November 2000, in Serra Negra, São Paulo State. At the time, the Brazilian Meeting of Postgraduate Programs in Mathematics Education (EBRAPEM) was not yet established and the National Meeting on Mathematics Education (ENEM) did not have research as its specific focus. It is so, because SIPEM was focused on basic education teachers. SIPEM gathered researchers to discuss, assess and outspread Brazilian research in Mathematics Education, and to drive information exchange with foreign researchers. ENEM focused teaching and development practices, and gathered researchers, teacher educators, faculty members and undergraduate students in the Mathematics field. EBRAPEM was organized by postgraduate students whose main goal was to help developing and spreading ongoing⁷ academic research. In 1997, based on the initiative by PUC-SP professors, among them, Benedito Antonio da Silva, Maria Cristina de Souza Albuquerque Maranhão, Sandra Pinto Magina, Saddo Ag Almouloud, Silvia Dias Alcântara Machado, Sonia Barbosa Camargo Igliori and Tânia Maria Mendonça Campos, decision was made to suggest the creation of a Mathematics Education GT to ANPEd.

This proposition was forwarded to ANPEd, which, according to its bylaws, established the creation of a Study Group (SG) in Mathematics Education. This group was approved at the 20th Annual Meeting after debates and large advocacy for it. At the time, it was set that its coordination would fall under the responsibility of Sonia Igliori for the following two years. It is worth noticing that the proposition to create this WG at ANPEd also met unfavorable

⁶ Brazilian Society of Mathematical Education (https://www.sbembrasil.org.br/sbembrasil/).

⁷ To get to known more

 $[\]frac{https://www.sbembrasil.org.br/eventos/index.php/sipem/historicohttps://www.sbembrasil.org$

opinions by members of the Mathematics Education community and by those who saw it only as Education field members, since some believed that

[...] contrary to what our document postulated, its creation would lead to greater isolation of Mathematics Education researchers from those in education. They said it was more important to participate in existing working groups than to create one specific for Mathematics Education. Proponents countered that many of us had already tried to submit research papers to ANPEd and received the response that the work could not be accepted, even without merit analysis, due to lack of review conditions, since its topic was not included in any of the existing working groups (Miguel et al., 2004, p. 74).

The aforementioned SG became GT 19 at the ANPEd General Assembly held in 1999. Silvia Dias Alcântara Machado, from PUC/SP, took over as its director until 2001, when its coordination was transferred to Luiz Carlos Pais, from UFMS, and to Marcelo de Carvalho Borba, from UNESP-Rio Claro. Table 1 introduces GT19 coordinators from its creation as SG to the present day.

Table 1.

GT 19 coordination (1997-2025.). ANPEd website and GT19 reports

| Biennium | Coordinators / Vice Coordinators / Institutions | |
|-----------|--|--|
| 2023-2025 | Celi Espasandin Lopes (PUC-Campinas) Júlio César Augusto do Valle (USP) | |
| 2021-2023 | Reginaldo Fernando Carneiro (UFJF) Flávia dos Santos Soares (UFF) | |
| 2019-2021 | Cármen Lúcia Brancaglion Passos (UFSCAR) Flávia dos Santos Soares (UFF) | |
| 2017-2019 | Andréia Maria Pereira de Oliveira (UFBA) Cármen Lúcia Brancaglion Passos (UFSCAR) | |
| 2015-2017 | Andréia Maria Pereira de Oliveira (UFBA) Maria Isabel Ramalho Ortigão (UERJ) | |
| 2013-2015 | Regina Célia Grando (USF) Andréia Maria Pereira de Oliveira (UEFS) | |
| 2011-2013 | Regina Célia Grando (USF) Andréia Maria Pereira de Oliveira (UEFS) | |
| 2009-2011 | Marcelo Almeida Bairral (UFRRJ) Fernanda Wanderer (UNISINOS) | |
| 2007-2009 | Adair Mendes Nacarato (USF) Marcelo Almeida Bairral (UFRRJ) | |
| 2005-2007 | Vinício de Macedo Santos (USP) Adair Mendes Nacarato (USF) | |
| 2003-2005 | Maria Tereza Carneiro Soares (UFPR) Janete Bolite Frant (PUC-SP) | |
| 2001-2003 | Luiz Carlos Pais (UFMS) Marcelo de Carvalho Borba (UNESP-Rio Claro) | |

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| 1999-2001 | Silvia Dias Alcântara Machado (PUC-SP) |
|-----------|--|
| 1997 – GE | Sonia Igliori (PUC-SP) |

According to Table 1, the vast majority of researchers who have coordinated GT19 over the years were affiliated with Postgraduate Programs (PPG) in Southeastern Brazil. Two (2) of the 26 coordination members were affiliated with PPGs in the Southern region and only 1 of them was affiliated with PPGs in the Northeastern region. Assumingly, this geographic distribution reflects PPGs concentration in Southeastern Brazil. Fonseca and Bairral (2023) recently mapped postgraduate programs in Northern Brazil in comparison to other regions in the country. They observed these programs' high concentration in the Southeastern region. Similar results were recorded by Alves and Silva (2024, p. 15), who analyzed the academic profile of CNPq productivity grant recipients in Mathematics Education and highlighted that "the Southeastern and Southern regions lead the frequencies, so that, altogether, they account for approximately 85% of the grant recipients."

GT19 and research: short-courses and commissioned works

The years following GT19 creation were a time to set the very foundations of its own practices and to the rise of its autonomy for its optimal functioning. From the very beginning, similarly to other WGs, a short-course and internal WG discussions were proposed, in addition to the presentation of papers submitted and approved by the Scientific Committee. This activity's topics were collectively defined by attendees at each annual meeting and they have always been related to the interests of this WG members. In other words, GT19 deliberates on the short-course topics to be offered at the subsequent meeting, at each ANPEd meeting. Once the topic is defined, researchers and research groups acknowledged by their expertise in the topics in question are listed and the collective deliberates on the matter.

The adoption of the Commissioned Work dynamics dates back to 2007, nine years after GT19's creation, as provided for in the report of activities from the 2006/2007 biennium. It is essential emphasizing that this practice was already common in other WGs.

GT19 link to research has been showing, not only through the presentation of Master's and doctoral academic papers at the Annual Meetings, but also through the perception of WGs as space for study and training for the growing specialization in Mathematics Education fields. This scenario was marked by specific publications and events, and it has led ANPEd to bring together researchers from different academic and scientific niches that, somehow, were distant from other topics under discussion in this field.

Thus,

[...] topics for Commissioned Works, Special Sessions, Short-courses and researchers invited to address the suggested topic, in addition to reflect the aforementioned interest of researchers involved in the GT, have resulted in GT19's acknowledgement as important forum for the presentation of and debate on research; for bringing together more researchers and for promoting debates on works [focused on] relevant themes but with little or no presence in past meetings (Santos, Relatório de Atividades, 2006-2007, p. 1-2).

GT19 started promoting and discussing topics requested by WG attendees, as well as other emerging topics in the Education field and their implications for Mathematics Education. Public policies aimed at qualifying Mathematics teachers and the impact of external assessments on Mathematics teaching were the topics chosen for the Commissioned Work of the 30th Meeting (2007). This new stage inaugurated the new proposition. Based on this first experience, Professor Antonio Vicente M. Garnica (UNESP) was in charge of organizing the final text, which was published in issue 21 of the Mathematics Education Bulletin – Bolema (2008). Four articles composed the work and they were written by Carvalho (2008), Pires (2008), Fiorentini (2008) and Ortigão (2008).

Decision was made to adopt a strategy practiced by GT12 – Curriculum – in subsequent meetings, and it consisted in calling for papers to support the final text to be presented at the meeting, within the section called "Commissioned Work". Thus, different researchers submitted papers based on the established topic, which would support the construction of the final text to be presented and discussed by another researcher. This dynamics for Commissioned Works has been in places in GT-19, since then.

At the time, it was agreed that both the Commissioned Work and its supporting texts would always be published, and it would be the way to give visibility to them all. According to ANPEd rules, only the text of a Commissioned Work would be presented at the Annual Meeting and it would always be published in the event's Proceedings. The strategy of publishing the Commissioned Work and its supporting texts in a dossier for a journal in the Mathematics Education or Education fields or in an e-book remains in place, and it gives greater visibility to discussions held at GT19.

The topic set for the 31st ANPEd Meeting (2008) still focuses public policies in combination to Mathematics Education, given the need for greater scientific outspread and discussion on it in Brazil, mainly after the National Education Council Resolution CNE/CP No. 09/2007 was approved. The work was organized by the professor. The three following meetings (2009, 2010 and 2011) addressed topics about concerns with teacher training and

formative practices in different school segments. 'Autobiographical Narratives and Oral History: Training Practices in Mathematics Education' – coordinated by Eliseu Clementino de Sousa (UNEB) –, 'Mathematics Education in Childhood' – coordinated by Rosana de Oliveira (UERJ) – and 'Mathematics Education in High School' – coordinated by Celi Espasandin Lopes (PUC-Campinas) – were the topics and coordinators chosen for the Commissioned work, respectively.

Subsequently, meetings started to mainly focus matters regarding Mathematics teachers' training or training provided for teachers' educators. Guilherme Prado (UNICAMP) in 2013, Andreia Oliveira (UFBA) in 2015, Jonei Barbosa (UFBA) in 2017 and Victor Giraldo (UFRJ), and Filipe Fernandes (UFMG) in 2019, were in charge of organizing and presenting the Commissioned work. The focus returned to understanding the challenges faced by reexistence processes in such a complex scenario at the 40th Meeting, held in 2021, because the group was experiencing the worse moments of the COVID-19 pandemic, amidst the denialist profile of government officials. Professors Marcia Cristina Cyrino (UEL) and Regina Célia Grando (UFSC) coordinated, organized and presented the section's papers.

According to the analysis of topics proposed at several ANPEd meetings through the Commissioned Work, and by bringing into the debate topics regarding public policies, mainly since the 30th ANPEd Meeting, GT19 broadened the discussed policies that, from that time on, started focusing topics currently gravitating in the educational field such as curricular and assessment policies, teacher training policies, reforms and proposals aimed at increasing the quality of education. This goal introduced itself as primary justification for actions, whether in basic or higher education, in teacher training or in education systems management. This expansion was a challenge for critical and post-critical reflections; as Lopes (2013, p. 8) states, it started negotiating "its political-academic space with such reflections, sometimes generating theoretical hybrids".

Since the inception of the short-courses, their topics have been established both by propositions by individuals interested in offering the short-course and by the explicit interest of researchers and GT19 attendees in developing and continuing their own agenda, which focuses on deepening research and debate in the Mathematics Education field. These actions have been intensified by the Brazilian Society of Mathematics Education (SBEM), given the multidisciplinary nature of this field. Therefore, national and international researchers who can contribute to the discussions on papers about relevant suggested topics based on assessing the previous meeting are nominated.

Table 2 introduces the commissioned works and short-courses taught at the ANPEd national meetings.

Figure 2.

Distribution of Commissioned Works and Short-courses and their respective responsibilities at the ANPEd National Meetings - 1999 to 2025. ANPEd website (www.anped.org.br) and GT-19 documents.

| Edition No. / Year and City | Commissioned Work / Responsible Person(s) | Short-course / Responsible person(s) |
|--------------------------------|--|---|
| 42nd / 2025 (João Pessoa) | Proposed Theme: Mathematics Education and Ethnic-Racial Relations Maria do Carmo de Sousa (UFSCar) | Mathematics Education and (Auto)biographical Narrative Research Adair Mendes Nacarato (USF) Jónata Ferreira de Moura (UFMA) |
| 41st / 2023 (Manaus) | Mathematics and Basic Education Teacher Training: Social Justice and Equity in the Process of Rebuilding Brazilian Democracy Vinicio de Macedo Santos (USP) | Mathematics curriculum production: experts and new knowledge for teaching and teacher training Luciene de Fátima Bertini (UNIFESP) Wagner Rodrigues Valente (UNIFESP) Discussion Circle: Mathematics Education and the Fight for Racial and Gender Equality Maria do Carmo de Sousa (UFSCar) Cristiane Coppe de Oliveira (UFU) Agnaldo da Conceição Esquincalha (UFRJ) Jónata Ferreira de Moura (UFMA) |
| 40th / 2021 (Belém) | Curricular (de)constructions for the initial training of mathematics teachers: challenges and scenarios of possibilities for (re)existence Márcia Cristina de C. T. Cyrino (UEL) Regina Célia Grando (UFSC) | Discussion Circle: What's Going On? Mathematics Education in the Face of Fascist Politics Sônia Maria Clareto (UFJF) Filipe Santos Fernandes (UFMG) |
| 39th / 2019 (Niterói) | Caravels in sight: training of teachers who teach mathematics within contexts of regulation, loss of rights, and forms of resistance Victor Augusto Giraldo (UFRJ) Filipe Santos Fernandes (UFMG) | The use of applications on mobile devices in the production of data in research in Mathematics Education Wagner Marques (UCAM) Marcos Paulo Henrique (UFRRJ) Alexandre Rodrigues de Assis (UFRRJ) |
| 38th / 2017 (São Luiz) | Theoretical and methodological approaches in mathematics education: similarities and differences Jonei Cerqueira Barbosa (UFBA) | Research in Mathematics Education developed with a sociological focus Sônia Maria Clareto (UFJF) |
| 37th / 2015 (Florianópolis) | Professional development of mathematics teachers: collaboration and curricular materials within the Education Observatory Program (OBEDUC) Andréia Maria P. de Oliveira (UFBA) | Research on the pedagogical practices of mathematics teachers: dialogues and methodologies Cristiano Alberto Muniz (UnB) |
| 36th / 2013 (Goiana) | Essay between Images and Concepts of Mathematics Education for Curricula, Practices and Teacher Training of and in the Initial Years of Elementary Education Guilherme do Val T. Prado (UNICAMP) | Mathematics Education for Young People and Adults: Discursive Practices, Training, and Research in Classrooms Maria da Conceição F. R. Fonseca (UFMG) |
| 35th / 2012 (Porto de | The place of Mathematics in the Mathematics Degree | Wittgenstein, (in)disciplinarity and school (mathematical) education |

| Galinhas) | Plínio Cavalcanti Moreira (UFOP) Ana Cristina Ferreira (UFOP) | Antonio Miguel (UNICAMP) Anna Regina L. de Moura (UNICAMP) Denise Silva Vilela (UFSCar) |
|-------------------------------------|---|---|
| 34th / 2011 (Natal) | Mathematics Education in High School Celi Espasandin Lopes (PUC-Campinas) | Perspectives on inclusive mathematics education Lulu Healy (UNIBAN) |
| 33rd / 2010 (Caxambu) | Mathematics Education and Childhood Rosana de Oliveira (UERJ) | Modeling and Mathematical Education Jonei Cerqueira Barbosa (UFBA) Andreia Oliveira (UFBA) |
| 32nd / 2009 (Caxambu) | Autobiographical narratives and oral history: training practices in mathematics education Elizeu Clementino de Souza (UNEB) | None |
| 31st / 2008 (Caxambu) | Public policies and Mathematics Education Cristiano Alberto Muniz (UNB) | Using video and the internet to study learning and teaching Arthur Belford Powell Rutgers University (New Jersey) |
| 30th / 2007 (Caxambu) | Public policies for training mathematics teachers and the impact of external assessments on mathematics teaching Antônio Vicente Garnica (UNESP) | Guiding activity in mathematics teaching: contributions from Activity Theory Manoel Oriosvaldo de Moura (USP) |
| 29th / 2006 (Caxambu) | - | Remote interactions mediated by computer technology: theoretical frameworks and methodological strategies in Mathematics Education Marcelo Almeida Bairral (UFRRJ) - coord. Luiz Carlos Pais (UFMS) Janete Bolite Frant (PUC-SP) Monica Rabello de Castro (UNESA) |
| 28th / 2005 (Caxambu) | - | History of Mathematics Education: Why and How? Wagner Valente (PUC-SP) - coord. Aparecida R. Silva Duarte (Univas-MG) Flávia dos Santos Soares (PUC-Rio) Maria Cecília B. Fischer (Unisinos-RS) Maria Célia Leme da Silva (PUC-SP) Neusa Bertoni Pinto (PUC-PR) |
| 27th / 2004 (Caxambu) | - | Qualitative research in Mathematics Education Marcelo Borba (UNESP-Rio Claro) |
| 26th / 2003 (Poços de Caldas) | - | Methodologies for analyzing multidimensional statistical data Saddo Ag Almouloud (PUC-SP) |
| 25th / 2002 (Caxambu) | - | Theory of Conceptual Fields and the Teaching of Geometry Marilena Bittar (UFMS) - coord. Paula Moreira Baltar Bellemain (UFPE) Ana Paula Jahn (PUC-SP) |
| 24th/2001 Caxambu | - | Real Numbers: When and How to Teach? Benedito A. Silva (PUC-SP) Sônia Igliori (PUC-SP) |
| 23rd / 2000 (Caxambu) | - | Computer science and mathematics education Marcelo de Carvalho Borba (UNESP) Telma de Souza Gracias (UNESP) |
| 22nd / 1999 (Caxambu) | - | - |

This Figure depicts significant progress on how Mathematics Education topics were approached in ANPEd meetings, from 1999 to 2025. The diversity of, and changes in, the topics throughout the past editions highlight transformations in Mathematics Education demands and challenges in Brazil. It has been seeking pedagogical alternatives for classroom activities, or theoretical-methodological tools aimed at new researchers' studies and training.

Figure 2 highlights GT19 deep concern with teacher-training policies aimed at Mathematics teachers when it comes to the Commissioned Work; 6 of the 12 topics address teacher training issues. Three topics address different stages of the Mathematics Education process, namely: Early Childhood, Secondary Education and Undergraduate Education. Two of them focused theoretical and methodological discussions; one aimed at mapping field contributions from the Education Observatory Program – OBEDUC/CAPES; and another sought to understand similarities and divergences between the theoretical and methodological perspectives of different researchers and research groups.

One discussion triggered at GT19 short-courses and commissioned works concerns inclusion, diversity and teacher training. Topics such as "Perspectives on Inclusive Mathematics Education" (Healy, 2011), "Mathematics Education for Young People and Adults" (Fonseca, 2013) and "Mathematics Education and the Struggle for Racial and Gender Equality" (Sousa et al., 2023) reflect concern with having teacher's training comprising a more diverse population of students, with different needs and from different socioeconomic realities, and with spark discussions about how Mathematics, as school discipline, can be organized to address these differences.

The large discussion on social and political issues, mainly in recent years, is becoming an important highlight. "Caravelas in Sight: Training of Teachers Who Teach Mathematics Between Contexts of Regulation, Loss of Rights, and Forms of Resistance" (Giraldo & Fernandes, 2019) and "Curriculum (De)constructions for Initial Teacher Training for Mathematics: Challenges and Scenarios of Possibilities for (Re)existence" (Cyrino & Grando, 2021) highlighted the community's discomfort and likely resistance forms against attacks and interventions that Brazil's education system has endured in recent years. The choice for the topic meets the impact of CNE/CP Resolution no. 02 (December 20, 2019) approval, which

provided for the National Curricular Guidelines for Initial Teacher Training for Basic Education and the National Common Core for Initial Teacher Training for Basic Education (BNC-Training). Still, in 2021, the short-course "What's happening? Education (Mathematics) in face of fascist politics" (2021), which was organized in online conversation circle format, in the midst of the Covid-19 pandemic, portrayed a political scenario of growing polarization and social setbacks that had straight impact on the Education field.

Including topics about "social justice" and "equity" in the most recent editions was also a way to highlight the understanding of GT19 researchers who see Mathematics as non-neutral curricular component. They do believe that Mathematics Education-related research play pivotal role in social transformation.

These debates point towards the need for acknowledging and rethinking curricula and pedagogical practices to make Mathematics Education more inclusive, representative and capable of contributing to society's transformations. These changes begin in schools, at all schooling levels and, most of all, by rethinking the Mathematics teachers' training in higher education programs, continuous qualification initiatives, postgraduate programs, university outreach projects, as well as by rethinking the relevance of Mathematics and technology as fields having strong impact on the current world.

Final considerations

Writing this article allowed both to get closer and farther away from the facts. The addressed subject as approached by delving into reports and testimonies by former coordinators, and by interweaving their memories and stories in order to tell the story of Commissioned Work and short-course sections' topics. A step back was taken to holistically analyze the documents available for the study. This process required the attempt of being quite synthetic about the gathered information and demanded the deletion of some events that were witnessed over the paths that have been taken.

The manuscript's writing shed light on a consolidated and diverse Working Group substantiated by theoretical and methodological approaches, research aims, and academic and scientific concerns. The group's unity focuses on fighting for democracy and for the quality of

public education; and on recognizing the need for rethinking schools and higher education institutions' discipline matrices to promote a more inclusive Mathematics Education for a society that seeks for equality. The 25th anniversary is worth celebrating. Here's to another 25!

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