

Untrained Math Teachers' Struggles with Special Needs Learners in Mainstream Classrooms

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ABSTRACT

This research investigates the complex and challenges faced by untrained mathematics teachers when handling learners with special educational needs within mainstream classrooms, specifically under the Philippine MATATAG curriculum framework. As the Philippine educational landscape shifts toward total inclusivity mandated by Republic Act No. 11650, general education teachers are increasingly tasked with instructing learners with disabilities in regular settings despite lacking specialized Special Education (SPED) training. Utilizing a qualitative phenomenological descriptive approach, the study explored the lived experiences of fifteen teacher-respondents at Bukidnon Faith Christian School, Inc. to identify specific pedagogical, emotional, and institutional barriers preventing effective educational inclusion. Key findings reveal that educators encounter significant barriers in pedagogical adaptation, specifically struggling to balance the rigorous, step-by-step instruction of the standard curriculum with the simplified, individualized support required by students with special needs to grasp abstract concepts. Furthermore, a chronic lack of specialized manipulatives and curriculum-aligned tools forces teachers to spend extra hours creating personalized resources, leading to persistent feelings of stress, frustration, exhaustion, and inadequacy. Despite these, professional challenges simultaneously foster resilience, creativity, and increased patience among staff. The study concludes that the mainstream setting risks becoming an environment of "exclusion within inclusion" due to these systemic gaps and the absence of institutional support systems. Recommendations include mandatory professional development workshops, the provision of specialized instructional tools, and improved collaboration between teachers, parents, and special education specialists to alleviate the administrative and emotional burden on regular educators. Ultimately, targeted institutional changes are required to ensure the educational needs of all learners are equitably met in an inclusive environment. By addressing these systemic gaps, schools can better support both teachers and learners in a mainstreamed environment.

Keywords: inclusive education, mathematics instruction, teacher training, mainstreaming, pedagogical challenges

INTRODUCTION

The current educational landscape in the Philippines is undergoing a transformative shift toward total inclusivity, mandated by Republic Act No. 11650, which institutes a policy of inclusion and services for learners with disabilities (Department of Education [DepEd], 2025). This mandate requires that all learners, regardless of their background or ability, be given equal access to mainstream classrooms. Consequently, a significant majority of learners with special educational needs (LSENs) are now integrated into regular classes, where general education teachers—particularly in specialized subjects like Mathematics—are tasked with their instruction (EDCOM 2, 2025). However, despite these legislative strides, a critical gap remains between policy and practice. Many mathematics teachers find themselves "untrained" or "non-SPED trained," lacking the specialized pedagogical tools necessary to bridge abstract mathematical concepts with the diverse cognitive and behavioral needs of LSENs (Allam, 2020; Macabenta et al., 2023).

The struggle is intensified by systemic problems, including a massive identification gap where millions of children with disabilities remain underserved or improperly assessed before entering mainstream settings (EDCOM 2, 2025). In the context of Mathematics, teachers encounter specific difficulties in instruction delivery, such as adapting complex problem-solving tasks to fit varied student capacities and managing the behavioral outbursts that often stem from learner frustration (Jugan, 2024; Patina & Bolongaita, 2024). Local studies highlight that many Filipino teachers feel overwhelmed and underprepared, citing a lack of Special Education (SNED) course units and insufficient instructional materials as primary barriers (Cognizance Journal, 2026; Tesoro & Belmoro, 2025). These challenges are not merely instructional; they are deeply emotional, as teachers grapple with feelings of inadequacy and the stress of balancing the needs of a diverse classroom without adequate administrative or professional support (Malanog et al., 2024; Tero & Revalde, 2024).

International literature mirrors these local concerns, emphasizing that while teachers generally support the philosophy of inclusion, the lack of professional development and the absence of multidisciplinary teams (such as psychologists and therapists) undermine the effectiveness of inclusive mathematics education (Moreira & Manrique, 2024; UNESCO, 2025). The transition from traditional instruction to an inclusive model requires more than just physical placement; it necessitates a shift in pedagogy that many untrained teachers are yet to master (Borges, 2022; Tunes, 2025). Without targeted interventions, the gap in mathematics achievement for marginalized groups continues to widen, exacerbated by systemic inequalities and a lack of culturally and cognitively responsive teaching strategies (ResearchGate, 2025). This paper seeks to explore the lived experiences of untrained mathematics teachers, focusing on their instructional challenges, emotional well-being, and the resources they require to foster a truly inclusive mathematical environment. Specifically it aims to answer these questions: (1) What are the main challenges and difficulties you experience when teaching mathematics and managing the behavior of students with special needs in a regular classroom? (2) How do these challenges affect you emotionally and in your work as a teacher? (3) What can you recommend to improve the resources, support, and teaching strategies needed to effectively teach mathematics to students with special needs in a regular classroom?

METHODOLOGY

Research Design

This study used a qualitative phenomenological design. It aims to investigate the lived experiences, instructional struggles, and emotional impacts of untrained mathematics teachers handling learners with special educational needs in mainstream classrooms during the school year 2025–2026.

The qualitative part helped capture the teachers' real experiences, stories, and perspectives in their own words, while the phenomenological part allowed the researcher to describe the "essence" of their struggles and identify common themes across their professional journeys. This non-experimental design is ideal as it captures authentic patterns and human insights in natural classroom settings through in-depth descriptions rather than statistical manipulation. By focusing on the participants' subjective realities, the study can provide a deep understanding of the challenges and needs of educators in an inclusive mathematics environment.

Participants and Setting

The study was conducted to fifteen mathematics teachers at Bukidnon Faith Christian School, Inc., during the Fourth Quarter of the School Year 2025–2026. The school operates both Junior and Senior High School departments, providing a diverse professional environment that is ideal for examining the instructional challenges, emotional impacts, and institutional needs of mathematics teachers handling inclusive classrooms.

Conducting the study in this school allowed the researcher to gather relevant data in a natural academic setting, reflecting the real professional experiences and behavioral management struggles of the teachers. By focusing on this specific locale, the study captures the authentic classroom dynamics and administrative support systems unique to this institution, ensuring that the findings are grounded in the actual daily operations of the school's mathematics department.

Research Instruments

To explore instructional challenges and emotional impacts, the researcher developed a Semi-Structured Interview Guide. This instrument was designed to elicit detailed narratives and was divided into three segments: (1) Instructional and Behavioral Challenges, (2) Emotional and Professional Impact, and (3) Recommendations and Support. To ensure data credibility, the researcher utilized Field Notes and Reflection Logs to document non-verbal cues and real-time professional experiences, ensuring an accurate transcription of the participants' authentic "voices."

First, to capture the lived experiences of the participants, the researcher developed a Semi-Structured Interview Guide. This instrument was designed to elicit detailed narratives regarding the teachers' daily interactions with special needs learners. The interview guide is divided into three (3) main segments based on the study's objectives:

Segment	Focus Area	Qualitative Goal
1	Instructional & Behavioral Challenges	To identify specific challenges in teaching math concepts and managing classroom behavior.
2	Emotional & Professional Impact	To explore the teacher's feelings, stress levels, and professional well-being.

3 Recommendations & Support To gather firsthand accounts of what resources and policies are needed for improvement

To ensure the credibility of the qualitative data, the researcher used Field Notes with participant consent. These tools allowed the researcher to document non-verbal cues and ensure an accurate transcription of the participants' "voices," reflecting their authentic struggles and insights. All instruments were administered in a flexible yet systematic manner to ensure the depth and consistency of the narratives collected.

Data Collection Procedures

Data gathering followed a systematic qualitative approach to capture the lived experiences of untrained mathematics teachers in mainstreamed settings. The process began with the selection of participants who met the specific criteria of having no formal special education training while being tasked with teaching mathematics to special needs learners. During the data collection period, the researcher conducted semi-structured interviews and utilized reflection logs to capture participants' real-time professional experiences. Following these interactions, in-depth follow-up discussions and field note reviews were administered to capture the teachers' retrospective accounts of their instructional challenges, emotional struggles, and perceived needs for professional support.

Data Analysis Procedure

The collected data were analyzed using thematic analysis, following a systematic qualitative process to ensure a rigorous interpretation of the participants' lived experiences. The procedure began with initial coding, where the researcher scrutinized interview transcripts to identify significant phrases and recurring sentiments, such as "overwhelmed," "lack of training," and "instructional inadequacy." These codes were then organized during the theme development phase, where they were grouped into overarching categories including Instructional Challenges, which highlighted difficulties in adapting abstract mathematics to diverse needs; Emotional Impacts, which captured persistent feelings of stress and inadequacy; and Resource Gaps, which identified the lack of specialized materials and formal training. Finally, the researcher synthesized these thematic findings to address the study's primary research questions, elucidating how the absence of formal Special Education training influences professional well-being and identifying the specific institutional resources and support systems required to foster a truly inclusive mathematical environment.

Ethical Considerations

The researcher ensured that strict ethical guidelines were followed to protect the rights, professional integrity, and well-being of the respondents. The authors of the adapted interview frameworks and literature sources were properly cited and acknowledged. The researcher explained the purpose of the study to the mathematics teachers and the school administration of Bukidnon Faith Christian School Inc. Participation was completely voluntary, and respondents were asked to sign an Informed Consent Form before the commencement of data collection. All information shared by the teachers—especially regarding their struggles and emotional vulnerabilities—was kept strictly private and anonymous through the use of pseudonyms (e.g., Participant A, Participant B). The data was only used for this study, and individual responses were not shared with school heads or colleagues to prevent any professional repercussions. The researcher ensured that data collection, transcription, and reporting were done honestly and accurately, without any manipulation of the participants' narratives. These ethical steps were ensured that the study respects the teachers' rights and dignity while keeping the research trustworthy and reliable.

Scope and Delimitation

This study focuses on the challenges, emotional impacts, and recommended strategies of untrained mathematics teachers regarding their experiences with special needs learners in mainstream classrooms at Bukidnon Faith

Christian School Inc. The participants involved fifteen mathematics teaching staff during the Fourth Quarter, SY 2025–2026. Information was gathered through interviews and qualitative surveys, which are analyzed through descriptive and thematic methods to better understand the lived experiences and instructional struggles of the participants.

The study is limited to untrained mathematics teachers within the Junior and Senior High School departments of Bukidnon Faith Christian School Inc. only and does not cover teachers from other subject areas, grade levels, or other educational institutions. The findings relies on the participants' self-reported struggles and perspectives, which may be affected by their level of openness and professional self-reflection. In addition, the research only looked at the primary variables instructional and behavioral challenges, emotional well-being, and recommendations for support and was not include other possible influences such as the students' home environment, specific medical diagnoses of the learners, or the school's financial data. These limitations are set to keep the study clear, focused, and manageable.

RESULT AND DISCUSSION

This study explored the lived experiences of untrained mathematics teachers in mainstreamed classrooms to understand the complexities of inclusive education in the current Philippine educational landscape. By examining the pedagogical challenges, emotional impacts, and institutional gaps, the research highlights the critical tension between policy expectations and classroom reality. The following sections present the thematic analysis of the data gathered from the respondents, organized according to the specific statements of the problem.

Instructional & Behavioral Challenges

The primary challenge identified is the significant pressure to adapt instructional pacing and behavior management. Mathematics teachers struggle to synchronize the learning speed of regular students with those requiring individualized support, a process described by Participant D as a struggle to "(makigdungan sa pacing sa regular students)." Because mathematics requires step-by-step concentration, teachers find it difficult to maintain student focus while simultaneously addressing the needs of those who fail to grasp abstract concepts initially. As noted by Participant B, students often require "simpler explanations and individualized support," which is difficult to provide in a large classroom setting. Furthermore, instructional delivery is hindered by a lack of specialized materials and language barriers, which Participant G noted leads to significant learner frustration. These findings align with local research indicating that large class sizes and insufficient instructional materials remain primary barriers to inclusion in the Philippines (De Vera et al., 2022). Internationally, studies confirm that teachers in inclusive settings often struggle with the "dual-role" of subject instructor and behavior interventionist, leading to compromised instructional quality (Tzivnikou et al., 2021). The implication is that without specialized assistants, math teachers will continue to face gaps in curriculum coverage.

Emotional & Professional Impact

The data reveals a complex emotional impact characterized by high levels of psychological strain coupled with professional resilience. Participant H reported feeling "overwhelmed and worried" regarding their ability to effectively support every student. Many expressed feelings of frustration and guilt when students fail to understand, with Participant I mentioning they often spend "extra hours creating resources instead of planning for others." Similarly, Participant A shared that while the work makes them feel "pressured and tired," it simultaneously helps in developing more patience. Despite these stressors, the challenges serve as a catalyst for professional growth, motivating teachers to develop greater creativity and understanding. Local literature highlights that Filipino teachers often utilize cultural coping mechanisms like "pagtitiis" (endurance) and "malasakit" (compassion) to navigate resource-poor environments (Hernandez, 2022). Internationally, research links the high emotional labor of inclusive teaching to secondary traumatic stress, emphasizing the need for institutional mental health support (Wray et al., 2022). The implication is that the emotional challenges on teachers is a systemic issue that necessitates institutional support to prevent teacher burnout.

Recommendations & Support

The participants unanimously recommend institutional interventions focused on specialized capacity building. Key suggestions include the implementation of mandatory professional development workshops on inclusive strategies and the adaptation of mathematical concepts. Participant J specifically recommended providing teachers with "professional development trainings" and ensuring classrooms have "enough learning materials." Teachers also requested the provision of specialized tools, with Participant I calling for "manipulatives" and "curriculum-aligned materials" to aid instruction. Furthermore, Participant B suggested that "collaboration among teachers, parents and specialists" is essential to improve the learning experience. Locally, Philippine experts emphasize that inclusive policies must be backed by adequate funding for teacher training (Dapudong, 2023). Internationally, successful inclusion is shown to require systemic support structures, including co-teaching models and accessible technology (Florian, 2021). The implication is that for inclusive education to be

effective, schools must move beyond mere policy awareness and focus on the technical equipping of teachers with the necessary tools and specialized skills.

Conclusion

Based on the findings of this study, it is concluded that untrained mathematics teachers in mainstream classrooms face a significant gap between inclusive education policies and the practical reality of the classroom. The research reveals that the "mainstream" setting often risks becoming an environment of "exclusion within inclusion" due to the lack of specialized pedagogical training and appropriate instructional resources. Educators are primarily challenged by the dual demand of adhering to the rigorous pace of the MATATAG curriculum while simultaneously providing the simpler explanations and individualized support required by students with special needs. This misalignment frequently leads to a disruption in planned instructional timelines and places a heavy administrative burden on teachers who must spend extra hours creating personalized learning materials.

Furthermore, the study concludes that the absence of institutional support systems results in profound psychological strain, characterized by feelings of stress, frustration, and guilt among educators. However, these challenges also act as a catalyst for professional resilience and instructional creativity. While teachers demonstrate a high level of "malasakit" or compassion, their personal efforts are insufficient without systemic intervention. Ultimately, for inclusive mathematics education to be truly effective and sustainable, there must be a transition from mere policy awareness to the technical equipping of teachers through mandatory professional development, the provision of specialized manipulatives, and the establishment of collaborative support networks involving parents and special education specialists. Only through these targeted institutional changes can the educational needs of all learners be equitably met in a mainstreamed environment.

RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations are offered to improve the landscape of inclusive mathematics education:

For Educators: It is highly recommended that teachers actively seek out informal professional learning communities or peer-mentoring setups where they can share localized "best practices" for classroom management and instructional modification. Educators should prioritize the use of differentiated instruction and integrate low-cost, indigenous, or recycled manipulatives to bridge the gap in specialized resources. Furthermore, practicing self-care and seeking emotional support from colleagues is essential to mitigate the psychological strain and "guilt" associated with the heavy demands of inclusive teaching.

For School Administrators: School heads should prioritize the allocation of funds for mandatory, school-based training workshops that focus specifically on the technical skills of modifying mathematics curricula for diverse learners. There is a need to establish a structured co-teaching or consultation model where regular teachers have scheduled access to special education specialists. Additionally, administrators should consider reviewing the teacher-to-student ratio in inclusive classrooms and providing administrative relief to teachers who spend excessive hours creating individualized instructional materials.

For Curriculum Developers: Curriculum designers, particularly within the context of the MATATAG curriculum, should focus on creating "inclusive-ready" lesson plans that already include suggested modifications for students with special needs. There should be an emphasis on developing standardized mathematical assessment tools that are flexible enough to measure progress for diverse learners without compromising the core competencies. Curriculum guides should also include specific modules on how to deliver abstract concepts, like fractions or geometry, using multi-sensory approaches.

For Parents and the Community: Parents are encouraged to maintain an open and consistent line of communication with teachers to ensure that the learning strategies used in the classroom are reinforced at home. The community and local stakeholders should support schools by providing or sponsoring specialized instructional tools and assistive technologies. Strengthening the home-school partnership help alleviate the teacher's burden and provide a more holistic support system for the learner.

For Future Researchers: It is suggested that future studies expand the geographical scope to include more regions and use a mixed-methods approach to correlate teacher training with student academic outcomes. Longitudinal studies could be conducted to observe the long-term emotional resilience of teachers, while other research could focus on the perspectives of the students and parents themselves to provide a 360-degree view of the mainstreaming process in the Philippines.



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