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Perceptions of 1st Grade Mathematics Teachers in Matatag Curriculum Implementation

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ABSTRACT - This study investigates the Perceptions and preparation of Grade 1 mathematics teachers regarding the implementation of the MATATAG Curriculum. Specifically, it aims to explore the perceptions of 1st grade mathematics teachers toward the curriculum and understand how they perceive its impact on instruction and learning and examine their level of preparation and readiness for its implementation. Using a qualitative research design, data were gathered through interviews and thematic analysis. The findings reveal that while most teachers view the MATATAG Curriculum as a positive step toward strengthening foundational skills in mathematics, challenges were identified, including insufficient training, limited time for preparation, and lack of resources. Teachers also expressed the need for ongoing support, clearer instructional guides, and enhanced collaboration among educators. These insights are crucial for informing policy decisions and ensuring that curriculum implementation is both effective and sustainable at the classroom level.

Keywords*: Perception, preparation, MATATAG curriculum, Mathematics teachers.*
SDG Thrust: *4-Quality Education*

INTRODUCTION

Matatag Curriculum is a newly established curriculum in the Philippines that places a strong focus on helping kids in kindergarten through grade three learn basic abilities like literacy, numeracy, and socioemotional skills. The DepEd discovered that teachers and students struggled with having too many subjects to study, which is why the curriculum needed to be "decongest," according to (Sison et al., 2023). One of the problems identified was the curriculum's excessive number of classes or subjects. With relatively little time allotted for instruction, the curriculum demanded that teachers cover an excessive number of learning abilities. As a result, "both teachers and learners were overburdened with lessons and other school tasks and activities. The outcome devastated our students. Their ability to grasp basic skills like reading and basic math problems was weakened (Duterte, 2023). The MATATAG Agenda strives to develop capable, employable, involved, accountable, and nationalistic citizens (Estrellado, 2023), concerning the adjustment to humanized learning and tackles the drawbacks of current frameworks.

Curriculum revision is necessary to keep it current with the most recent research and suggested practices for enhancing student learning and tracking progress (Ilkiw et al., 2017). Even if there may be opposition to curriculum modifications, better learning techniques and curricula enhances student learning outcomes and simplify the teaching process (Atwa et al., 2022). It has been observed that curriculum revision is a useful tool for altering teaching strategies and influencing students' learning to adapt the changing global environment (Morris, 2019).

Singapore mathematics continues to hold the top spot in the world because of the solid foundation of syllabus built upon. This mathematical framework was created by Singapore's MOE with five key areas of focus: concepts, skills, processes, metacognition, and attitudes (Cheng and Yeo, 2022). Trends in International Mathematics and Science Study (TIMs) 2011 findings demonstrated that: (1) students' motives decline with time in school; and (2) the strongest correlation between mathematical achievement and self-confidence in mathematics (SCM) exist (Kaur, 2019). Singapore believes that the secret to educational success is a combination of teachers and students. As a result, more time and space have been provided for educators

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and learners to grow as individuals and to jointly create outstanding teaching and learning opportunities. The best way to characterize the current school mathematics curricula is as ones that meet the demands of each and every student (Kaur, 2014). It is also clear that Singapore has the best schools for teaching mathematics to pupils.

According to PISA, Hong Kong ranks in the top 43 countries/regions in terms of performance. In math, science, and reading, Hong Kong pupils perform best, coming in third and sixth respectively (Lee and Manzon, 2014). Students gain from the educational system regardless of their socioeconomic status. The goal of Hong Kong is to help students become more proficient in thinking critically and creatively, inquiring and reasoning mathematically, and using mathematics to conceive and solve issues in both everyday life and mathematical contexts (Leung et al., 2014). When organizing students' learning, teachers are expected to take a student-centered, activity-based, and hands-on approach. They are also encouraged to use tangible examples from everyday life wherever possible (Lai et al, 2020). It is anticipated that students would learn from tangible to abstract, and that they will use computers and calculators to help them along the way.

Tanzania concentrated on the "3Rs"—reading, writing, and math—in Grades 1 and 2, which are the fundamentals of literacy and numeracy in English (Ngussa et al., 2017). The reform required these abilities to get roughly eighty percent of the instructional time in these grades. It was discovered that teacher preparation had a favorable effect on how the new curriculum was implemented (National Research Council et al., 2010). Enhancements to the teaching-learning settings, classroom instructions, student learning skills, teacher training programs, community attitude, and accountability are some of the suggested measures to address the problem. The findings give educators and other stakeholders insight into the patterns of mathematics achievement and related factors, which they may use to improve curriculum development and instructional strategies for mathematics at all educational levels (Mazana et al., 2020).

In the Philippine educational system, mathematics is required subjects for all programs and levels. The vocabulary used in this field is to distinct and accurate. Mathematics is a tool for day-to-day living (Ogena et al., 2018). Mathematics Curriculum considering the PISA standards, particular, and the depth of content, the breadth of application of content to practical life situations, the aspect of problem-solving processes, and on the curriculum contexts (Golla and Reyes, 2020). Educational system should place a high priority on the teaching and learning of mathematics (Guinocor et al., 2020) therefore; gender, prior math grade, frequency of lesson study, and preferred method of learning, which means they require extra care and more activities tailored to their learning preferences in the context of the new normal.

As the rate of global change quickens, the significance of creating curriculum in improving instruction and learning is increasing (Henderson et al., 2011). To train students to assume their roles and responsibilities must adapt to the changing needs of the world. In its "Education 2030" position paper, the Organization for Economic Co-operation and Development (OECD) states that "the concept of curriculum should be developed from "predetermined and static" to "adaptable and dynamic (Schleicher, 2018). Teachers and schools should be able to update and align the curriculum to reflect changing societal requirements as well as individual student learning needs (Jacob, 2010).

In (Prensky, 2010) study presents a critical analysis of the existing global curriculum, arguing that traditional emphasis on disciplines such as science, math, language arts, and social studies must be changed to better prepare students for the future (McDonald, 2016). According to (Schwartzman, 2020) the actions, relationships, and accomplishment skills must be included, and these subjects operate as stand-ins for core competencies that can be taught in more creative ways. But according to Prensky an advocate of more flexible curriculum in which students receive instruction in core subjects that are based on their individual interests and needs, but in which all students receive instruction in the core skills of Effective Thinking, Effective Action, Effective Relationships, and Effective Accomplishments. The 2023 report from UNESCO highlights the need for a substantial shift in education in order to address historical injustices and advance a more equitable and sustainable future (Lewis et al., 2021). It emphasizes the need of lifelong learning for all people, especially the under privileged, and the necessity of a new educational social compact to promote environmental, social, and economic justice. In order to better prepare students for the society they will inhabit, the study emphasizes the importance of tying classroom instruction to current events (Arends and Kilcher, 2010)

The Department of Education (DepEd) launching the new curriculum that is anticipated to resolve the problems plaguing the current K–12 curriculum, which was implemented in 2012 ten (10) years ago (Hew et al., 2007). The Philippines is still struggling with learning poverty and the ongoing difficulties of post-pandemic education (Sanz Ponce et al., 2023). To address this, the DepEd created the significant reform known as the Matatag Basic Education Curriculum, which places to emphasis on the fundamental abilities and critical competences of students in kindergarten through tenth grade (Mendoza, 2023). The researchers desired to emphasize the relationship between learning and socialization. The Matatag Curriculum Project reveals the application of this theory by engaging the learners in a learning environment Matatag Curriculum reinforces acquiring an education that provides them the basic knowledge that they need (Albert et al., 2023). Curriculum theory is one of the least understood ideas in the curriculum field, served as a major inspiration for this work (Coşkun Yaşar, 2021). But when it comes to

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analyzing the type of learning environment that exists, (Pinar, (2019) described curriculum theory as a collection of ideas that provide the school curriculum more purposes. According to (Syomwene, 2020), the curriculum theory is the collection of analyses, interpretations, and understandings of the curriculum phenomena.

Research Questions

The primary objective of this study is to addresses the teachers' perceptions in teaching 1st grade mathematics towards the matatag curriculum implementation and the teacher's perceptions, preparations, and strategies toward the transition of the new curriculum. Specifically, addressed to this study are the following questions:

1. To describe the perception of 1st Grade Mathematics teachers in the implementation of Matatag Curriculum;
2. To describe the Preparations of 1st grade Mathematics teachers in the implementation of Matatag Curriculum; and
3. To determine the adaptive teachers strategies of the 1st grade Mathematics teachers in the implementation of Matatag Curriculum.

METHOD

Participants

The following criteria qualified the participants of this study: (1st) DepEd teachers of Davao del Sur, (2) specifically teaching Mathematics in the 1st grade. (3) At least two (2) years in service (Bekdemir, 2010). (4) willing to be interview (Thanheiser et al., 2013). The important considerations are the number of respondents invited to participate in the discussions. Although it generally accepted the six (6) to eight (8) participants are sufficient (Kiger et al., 2020). But some studies has reported as many as thirteen (13) to fifteen participants (15) (Saunders et al., 2016).

Instruments

This study used recording technologies to collects information through audio and video recording, pencil, paper, and interview guides (Tessier, (2012). The benefit includes ensuring interviews to take place training, monitoring interviewers, ensuring data quality, secure data storage, and easy data sharing (Hensen, 2021).

Design and Procedure

Researchers applied In-Depth Interviews (IDI) remain one of the most popular methods used today because they allow us to study both common and uncommon events that occur in "real life settings," as well as to document various perspectives of reality and deepen our understanding of people's motivations, perceptions, and experiences (Johnstone, 2017). Qualitative research method; the collection techniques are heavily characterized by where a group of people is selected to discuss in depth a specific topic or question, supported by an external operations expert (Van Eeuwijk and Angehrn, 2017). The researchers used thematic analysis, which is a qualitative data analysis technique, was entail examining the data set and searching for patterns within its interpretation to identify themes (Kiger et al., 2020). After the data is analyzed, the academic resilience model will be developed. This phase would be a collaborative process. This study utilized a Qualitative research method, to ask open-ended questions like "how" and "why" whose answers are difficult to quantify. It was utilized to comprehend ideas, feelings, or encounters (Tenny et al., 2017) . You can obtain in-depth knowledge about poorly understood subjects by conducting this kind of research (Arifin, 2018).

The researchers made the following provisions in order to conduct the study and data collection procedures:

Asking permission to conduct the study. The researchers sought authorization to perform the study from the University of Mindanao Digos College school administrators and research office admins so with the partner school.

Development of Research Instruments. The researchers secured guide questionnaires for the adviser to review. The research adviser subsequently checked the items in the questionnaire.

Validation of Research Instruments. The experts sought to validate the questionnaires to see if the items are relevant to the study's research location. The questionnaires tested with 5 participants not part of the study to determine their internal validity.

Distribution and Retrieval of the Questionnaires. After the approval, the researchers moved on to the actual in-depth interviews with the chosen participants, and each of them was asked to answer the questions honestly.

Data Collection and Tabulation. After the participants complete the interview, it will be collected. The researchers seek the assistance of a data analyst for the results. The researchers compiled, analyzed, and interpreted all the data.

Ethical Considerations

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Ethical considerations shall always be of the utmost importance for all researchers. Researchers are faced with various choices and decisions related to benefits, harm, or risks in their work, whether from the complex approaches, strategy, or any other part of this disciplinary space. Ethical research, carried out lightly by (Markham & Buchanan, 2017), examines what can and must be possible, just, and fair within each context. In addition, (Baxter et al., 2015) also stated that researchers are responsible for protecting the participants, their company, and the data they collect. They also said that ethical considerations are not responsibilities that should be taken lightly. With full knowledge of all the above considerations, the researchers will follow steps to ensure that privacy will be fully assured and protected. The ethical considerations of this study are as follows (Jamshidi et al., 2014):

Trust. A study's credibility or rigor depends on trustworthiness of the information, interpretation, and procedures to guarantee its quality (Cope, 2014). To ensure the consistency of the data, the researchers will record and take note of the participant's responses during the data gathering. Moreover, the researchers will list the study's detailed process to ensure the research paper's trustworthiness.

Transparency and accountability. In order to participate in the study, the researchers should provide informed and voluntary consent. Researchers should transparently disclose how data are collected, used, and kept. In addition, the objectives, procedures, and possible risks or benefits of research should be made available to the participants. Furthermore, the participants will also have the option to withdraw from the study whenever they feel like without consequences.

Equity and inclusion. In research on the Curriculum implemented by the teachers, ethical consideration for equity and inclusion necessitates the intentional design of studies inclusive of diverse elementary educators populations, ensuring that voices from various racial, ethnic, socioeconomic, gender, and ability backgrounds are heard and valued. This approach is not merely about recognizing various groups' unique challenges and strengths. However, it also seeks strategies to help all elementary educators, thus contributing to greater inclusion and matatag curriculum implementation.

Humility and co-learning. This perspective shows that the researchers need all the answers, and their accurate understanding comes from a collaboration process. Humility encourages researchers to accept the biases and constraints inherent in their work while respecting the unique perspectives and professional expertise of elementary educators, schools, and the community. Co-learning is a way of exchanging knowledge and experience, thus promoting an inclusive and equal research environment.

Respect for diversity. In order to meet this principle, researchers should recognize the diversity of backgrounds, cultures, identities, and experiences brought by elementary educators in their teaching context. That calls for avoiding stereotypes and prejudices in all kinds of factors. To foster an inclusive research environment that ensures that all students' voices and unique challenges are heard and honored, ultimately leading to more equitable and meaningful perceptions of the elementary educators in the matatag curriculum.

As long as these ethical principles are respected, researchers can carry out studies that improve curriculum implementation and contribute positively to the well-being and perceptions of elementary educators, thereby fostering a more equitable and inclusive educational environment.

RESULTS AND DISSCUSSION

Perceptions of 1st Grade Mathematics Teachers in Matatag Curriculum Implementation

Figure 1 This chapter outlines the study's results as well as an in-depth analysis and interpretation of the collected data. The discussion with teachers is centered around themes that sprung from the first-grade mathematics teachers' responses on how they feel and what preparations they have taken regarding the Matatag Curriculum. Relating to these themes, the analysis explores how educators negotiate new curriculum framework challenges and the opportunities available to them.

The first part describes teachers' perspectives on the curriculum regarding its operationalization, differentiated instruction, teacher support, curriculum adaptation, and simplifying learning objectives. This discussion illustrates how the supersized curriculum shapes pedagogy and student experience. The second part looks at what teachers did to prepare, including professional development, available resources, support systems, how they taught, and how well they knew the curriculum. Lastly, the third part of the result discusses the teachers' adaptive strategies as Grade 1 Mathematics teachers. Awareness of this information is essential in judging the success of what part of the curriculum has been taught.

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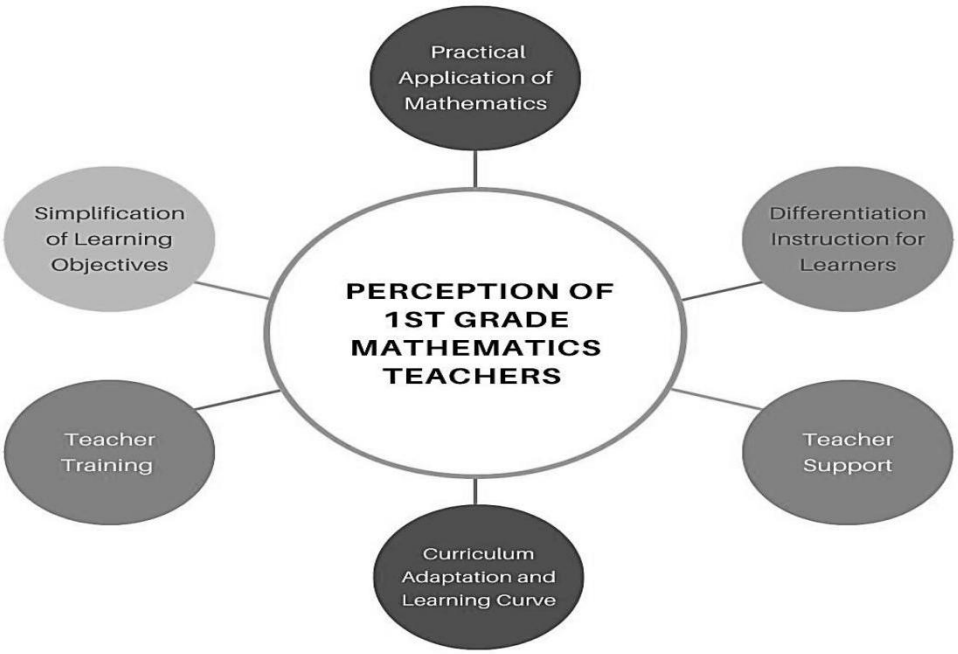

Figure 1: Thematic Diagram on Perception of 1st Grade Mathematics Teachers

Practical Applications of Mathematics

Mathematics teachers in Grade 1 under the new Matatag Curriculum understand the need to include real-life usage in Mathematics teaching. Traditional approaches prioritize abstract computation. However, the Matatag Curriculum concentrates on how mathematical concepts relate to everyday life. Problem-solving activities are usually noted by teachers who relate students to real life, asking them to consider how students use math in their own lives. Students learn to see math not just as something learned in their math books but also as something applied in real-life contexts, using the familiar examples of buying snacks at the canteen or counting how much the fare to the jeepney would be.

One participant said that:

"It helps students understand that math is all around them, and the more they recognize it, the more they appreciate it,"[Line 2, Participant 1]

This approach creates links between the micro and macro, allows for learning to become meaningful, and enables the transfer of mathematical skills to situations you encounter in life.

The inclusion of higher-order thinking skills (HOTS) problems further supports this approach by challenging students to analyze, evaluate, and apply their knowledge instead of merely memorizing formulas. This part of the curriculum is designed to allow students to develop critical thinking and problem-solving skills early in life. Teachers shared that students who find practical uses for these real-life lessons develop confidence in dealing with numerical tasks.

Other participant said that:

"When the students find out they are already using math without even knowing they are using it, they get excited," [Line 1, Participant 9]

This realization illustrates how context-based learning promotes interest and understanding.However, for practical applications to work well, the lessons must be planned well; teachers need the right resources and training. A few of the teachers' participants noted that while the curriculum encourages connections to the real world, teachers can benefit from ongoing support in creating activities grounded in students' daily lives. Writing workshops contextualized math problems and relevance to the local communities would improve this process even more. This equips teachers with practical strategies for the Matatag Curriculum, reinforcing students' capacity to utilize mathematical skill sets in the classroom and life.

Differentiated Instruction for Learners

The Matatag curriculum recognizes that the learners in the classroom are not the same, thus promoting differentiated instruction based on how high or low one can learn. Teachers use manipulatives and peer group work to boost student motivation and understanding, complemented with localized language used in classrooms. Others indicated that reduced competencies led to greater attention to individuals in the classroom and, thus, a more inclusive, student-centered model.

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One participant said that:

"Every child learns differently," [Line 1, Participant 8]

Other participant said that:

"*We have to adapt how we teach and let every student master math at his or her speed."* [Line 1, Participant 6]

This way of looking at things emphasizes the importance of flexible teaching strategies.They are also able to supplement interactive and collaborative learning surrounding mathematical concepts. Group activities allow students to learn from each other, and manipulative use and hands-on tasks solidify abstract understanding. Employing varied pedagogical methods enable teachers to meet diverse learning needs and nurtures an interactive classroom environment. Teachers also shared that the activities that let students visualize and interact with math concepts are beneficial for those who have difficulty with numerical concepts.

Teaching resources and professional development opportunities play a significant role in whether differentiated instruction will work because, although it can have many advantages, it does come with a price. However, some teachers said modifying lessons to match different learning methods is impossible without sufficient resources and training. It will be challenging to put differentiation strategies in place without this. As no learners should be left behind, the time is high for schools to up the ante on resources as well as the professional development of teachers. In this regard, creating space for educators to learn, share, and practice the best approaches to differentiated instruction may also aid in more practical implementations.

Teacher Support

Every teacher participants that the researchers spoke has identified support as a prerequisite to successfully implementing the Matatag Curriculum. They recognized the benefits of the new structure and competencies while explaining the procedures they must also address to adopt proper methodologies. Among them, the most urgent is the shortage of instructional materials and textbooks. Most were forced to do independent research or reuse their materials from the previous curriculum because no updated resources were available.

One participant said that:

"We have all bought into the vision of the new curriculum," one teacher said, *"but without the proper materials, it is challenging to implement this effectively."*

This statement reflects the institutional need for more tangible support.

In addition, some teachers expressed the need for more precise guidance regarding aligning their teaching methods with the output of the Matatag Curriculum. Although they value the focus on active learning and problem-solving, many teachers constantly work to adapt their lesson plans and assessments to match. Others indicated they would appreciate more formalized professional development, particularly in using technology effectively, assessment design, and differentiation.

To eliminate these apprehensions, the Department of Education must increase training seminars, workshops, and accessible teaching materials. Offering teachers more organized lessons and example activities would reduce the transition's impact and improve instruction quality. Most curriculum reform will either sink or swim based on how well-facilitated teachers are, which means it is up to educational institutions to prioritize their needs.

Curriculum Adaptation and Learning Curve

Every teacher being interviewed cited support as the topmost prerequisite to successfully implementing the Matatag Curriculum. They understand the advantages of new structures and competencies and provide continuous explanations of the steps needed to accomplish the proper methodology they need to follow. Among them, the most pressing is the lack of instructional materials and textbooks. Many were left to do independent research or repurpose their materials from the old curriculum since updated resources did not exist.

Moreover, some teachers have mentioned the vagueness of aligning their teaching method to the Matatag Curriculum's outcome. While they appreciate the emphasis on active learning and solving problems, the teachers still struggle to find ways to modify their lesson plans and assessments accordingly. Others expressed that they would like additional formalized professional development, especially in relation to the effective use of technology, assessment design, and differentiation.

To eliminate this dreaded fear, the Department of Education should conduct more training seminars or workshops and provide classroom materials accessible to teachers. By giving teachers more created lessons and example activities, there would be less transition impact, and higher-quality instructions passed on to students. The bigger game at play here is that successful curriculum reform will rise or fall on how well teachers are supported from behind the scenes, and that means the onus is on education organizations to set the conditions for success.

Teacher Training

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The success of the Matatag Curriculum relies heavily on practical teacher training. Many teachers recognize the importance of more professional development to better understand the curriculum framework, learning outcomes, and teaching strategies. Without adequate teacher training, difficulties in aligning their teaching methods with the curriculum's objectives can hinder student learning. To one educator,

One participant said that:

"We do want to adapt, but to know how to deliver lessons effectively, we need a lot more training."

This emphasizes the need for structured professional development programs.

Teachers will require training to navigate the curriculum; workshops, mentoring programs, and continued training initiatives will help with this transition. More specifically, they would benefit greatly from training in assessment strategies, differentiated instruction, and the integration of real-life applications in mathematics. Access to lesson plan examples or classrooms was also mentioned as an important source of insight into effective teaching.

Focus on sustainability through a teacher training strategy suitable for the long term. The most substantial schools provide ongoing professional development opportunities that allow teachers to iterate on their instructional methods over time. This will lead to better execution of the Matatag Curriculum and, ultimately, improved learning outcomes for the learners.

Simplification of Learning Objectives

The Matatag Curriculum aims to provide greater focus and depth of learning in mathematics teaching by filtering learning objectives. Teaching fewer competencies enables teachers to invest more time in every topic, allowing students to understand thoroughly. While this approach was advantageous to struggling learners, some educators said it could leave advanced students needing supplemental enrichment activities to stay challenged.

One participant said that:

"The lessons are too easy for some students. There are not enough materials to engage fast learners."

This shows the importance of a carefully balanced approach to instruction.

More straightforward learning objectives can be counterproductive without differentiation to meet learners' needs. Teachers proposed adding additional instructional materials to challenge advanced learners with more advanced problems and to remediate those students who need more work. Flexibility built into the curriculum allows all students to be suitably challenged and supported.

This shows that the Matatag Curriculum is a potential intervention that can improve the performance of first graders in Mathematics, so it can be proposed and tested as an early step to improve the Mathematics education curriculum further. It integrates real-life applications, differentiates instruction, and limits it to only a few competencies. However, the effectiveness of this will depend significantly on how teachers are supported. Having access to ample instructional materials, professional development opportunities, and guided implementation is a necessity.

Beyond further responsiveness, the curriculum must be maximally impactful if it succeeds only when resourced appropriately with dedicated and trained teachers. Overcoming these issues will allow educators to provide effective instruction, improving student learning outcomes. The Matatag Curriculum has the potential to transform early mathematics education and prepare students with skills for a lifetime, provided that the right support is given.

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Figure 2: Thematic Diagram on Preparations of the 1st Grade Mathematics Teachers

Professional Development and Training

In this theme, the Matatag Curriculum will hinge significantly on the professional development of teachers before they engage with new practices in the classroom. As

curriculum implementers, teachers are fundamental to student learning, and their ability to comprehend new pedagogical models directly correlates with their ability to implement them. A few participants described their experiences with training programs, noting that, on the one hand, initial training helped give them a structured plan for the curriculum, but, on the other hand, initial training did not adequately prepare them for the complexities of the plan's implementation.

One participant said that*:*

"It restructured how we put lesson plans together."

Another participant stated that:

"It gave us a more precise focus on what we wanted them to learn".

It can be understood that by the end of the training, participants were starting to think about how the changes would impact not only their short-term lesson planning but also individual lesson planning. They both acknowledged that more training would be needed to refine their teaching methods.

Another participant said that:

"If I had the opportunity to shape the course slightly differently, I would have approached it more from the user perspective and found someone who could connect theory and practice and show how theory can be applied. I feel like the training focused a lot more on conceptual knowledge, rather than hands-on applications."

Participant echoed this when he remarked that he would also have liked to see more interactive workshops and classroom demonstrations.

The evidence collected indicated that baseline training is an important first step but pointed to the need for ongoing professional development to support teachers as they transition. However, it can be difficult for teachers to adapt their curriculum without ongoing training, leading to inconsistent teaching methods.

Further, professional development cannot consist of a single training. Notably, this training must be on the long-term spectrum, such as workshops, mentorship programs, and peer learning communities to empower teachers with sustainable skills to comfortably integrate the curriculum. Not being able to prepare new teachers properly could lead to lower learning for students because not having enough expertise to deal with the challenges in the classroom could inhibit tribal ideas of teaching. A second, but no less important, process that shapes the classroom environment in which the learning of mathematics occurs is strengthening teacher training so that teachers are knowledgeable about the curriculum delivered and the best-practicing teaching strategies are provided to students for a better understanding of mathematics.

Availability of Training Resources

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Implementing the Matatag Curriculum depends, in no small part, on the professional development teachers are subjected to before introducing new teaching and learning practices in the classroom. Moreover, as the people who implement curriculum, the teachers are central to anything students learn, and the extent to which teachers can understand their new pedagogical models depends on their ability to put them into practice. Some of the interviewees shared their perspective on training programs, highlighting that on one side, initial training is helpful in terms of providing them with a guide plan to use for the curriculum; however, on the other side, the initial training they received was not enough to prepare them for the intricacies that they would face while implementing the plan.

One participant revealed that:

"We restructured how we put lesson plans together." [Line 3, Participant 7]

Another participant said that:

"It gave us a more precise focus on what we wanted them to learn." [Line 4, Participant 4]

By the end of the training, you could sense that people were beginning to digest what it would mean for their short-term unit planning and individual lessons. Both admitted that additional training would be necessary to improve their teaching style.

Another paerticipant said that:

"If I had the chance to guide the vector differently, I would have taken it more from the user perspective and brought in someone who would connect theory and practice and show how theory could be applied."[Line 3, Participant 2]

Another participant shared that:

"I think the education was much more conceptual knowledge than hands-on practice." [Line 4, Participant 7]

Which another teacher agreed, saying that he would have also appreciated more interactive workshops and classroom demonstrations. The evidence gathered suggested that baseline training is a helpful starting point but highlighted the need for ongoing professional development to support teachers as they adapt. However, the lack of ongoing training can make it hard for teachers to adapt their curriculum, and teaching methods can become inconsistent.

Moreover, professional development cannot be merely one training. Notably, this training has to be in the long-term spectrum, such as workshops, mentorship programs, and peer learning communities to comfortably equip teachers with sustainable skills to saddle the curriculum axis. Inadequate preparation for new teachers can have negative implications for student learning outcomes, as an insufficient background can prevent one from tackling the vast number of problems emergent during tribal teaching. This is adapted more by reinforcing teacher training because teachers need to recognize the curriculum and apply the most effective teaching methods so students can understand mathematics.

Support System and Collaboration

Collaboration and institutional support are vital for equipping teachers to deliver the Matatag Curriculum. Many who attended mentioned that collaborating with fellow educators gave them a chance to share ideas, fine-tune approaches to teaching, and work together to solve problems. For example, as one participant offered, discussions with peers helped to clear some rarely touched-upon topics. At the same time, another teacher participant pointed out how exchanging lesson plans and teaching strategies increased the general quality of instruction. One participant also recognized that a strong support network is beneficial, especially regarding complex topics.

However, informal peer-to-peer mentoring indicates a shortage of programs for structured collaboration. Teachers tend to establish support organizations on their own rather than receiving guidance through structured mentorship programs. Without an organized system, some educators gain more from collaboration than others, which leads to discrepancies in how the curriculum is shared within different schools. The situation is compounded when the absence of a common support system can create problems adapting a new curriculum, negatively impacting student learning outcomes.

In order to tackle this, education stakeholders need to set up structured collaboration programs, like professional learning communities (PLCs), in which teachers can meet regularly to discuss best practices and education resources. Schools also need to provide institutional support, host workshops, encourage peer-to-peer observations, and provide advice from experienced mentors. When teachers are provided access to structured support, they can practice by teaching the lessons and enhancing their practice to implement the instructional program.

Pedagogical Adaptation and Strategies

Teachers have adjusted their delivery with the advent of the Matatag Curriculum — a pedagogical shift toward new teaching strategies. In contrast, many educators embraced more student-centered learning approaches, including integrated, hands-on activities to increase student engagement. As for elements of exploratory learning, student acceptance was gained, according to one teacher, while highlighting another participant's views regarding recreational activities through real-life problem-solving. The interactive lessons were also deemed highly effective in improving student motivation and understanding by the participant.

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This shift to more creative means of conveying the material differs from traditional and memorization-based education, which has long marked early education practices. However, some educators struggled to apply these strategies without organized training or guidance. They appreciated the benefit of interactive teaching but decided they needed more support integrating these methods into their daily lesson plans. Compounding these struggles is that few resources are available that use language and ideas about pedagogy familiar to practicing educators.

Teachers must get time training and ongoing professional learning with best assessment practices to tap the power of pedagogical adaptation. This may also be compounded by a lack of stable funding and investment in training initiatives to equip educators with high-quality instructional materials and resources. Aligned pedagogical and professional development opportunities are tailored to strengthen the implementation of the Matatag Curriculum and direct teachers to improve learning results.

Curriculum Mastery and Familiarity

Since its implementation, it has not been easy for teachers to learn the new competencies, standards, and methodologies, as it is no small feat to master the Matatag Curriculum. While some educators have noted that the new framework is more structured and easier to follow, others have found the advanced competency structure challenging, with the curriculum yielding clear learning priorities that informed lesson design and learning planning versus recognizing the time commitment associated with adjusting to new expectations. One participant pointed out that although increased depth in the curriculum enabled more effective mastery of the concepts, it raised challenges for teachers unfamiliar with how the curriculum was structured.

A complete familiarity with the curriculum's frame is essential for teachers to deliver practical lessons. Understanding the competencies gives teachers the confidence to support learning, measure student growth, and adjust instruction. However, some teachers may still have difficulty doing so without ongoing training and professional development that supports understanding and implementing the curriculum's standards. This lack of familiarity can produce inconsistencies in lesson instruction and make it challenging for students to progress in mathematics.

The findings highlight that ongoing curriculum training and resource development are critical to ensuring that whoever teaches the new standards can fully qualify. This can also deepen teachers' grasp of the Matatag framework through mentoring programs, curriculum guides, or training-like sessions. This can create greater instructional quality, which has proven to improve student learning gains when all teachers have mastered the curriculum.

The Matatag Curriculum is crucial for the successful implementation of first-grade mathematics teachers. Although initial training programs have established a base for educators, the demand for ongoing professional development remains clear. Lack of training and access to resources will ultimately disadvantage teachers and their students. Also, more localized pedagogical materials, support systems, and co-learning must be bolstered to standardize curriculum implementation further.

Moreover, pedagogical adjustment and curricular commandments are items of constant attention. Resources and professional learning opportunities must be offered to teachers to develop their instructional practices and introduce the curriculum's goals in developing their learning programs. Education schools and policymakers must focus on sustained training programs for teachers and implement systematic mentorship programs so educators cannot face challenges independently.

Overall, by emphasizing these emphases, the Matatag Curriculum has the potential to enhance how it is embedded in classroom teaching, with implications for improving student engagement, developing a deeper conceptual understanding of mathematics, and ultimately developing proficiency in mathematics. This investment in teacher preparation provides young learners with a high-quality mathematics education, an important component for future academic success.

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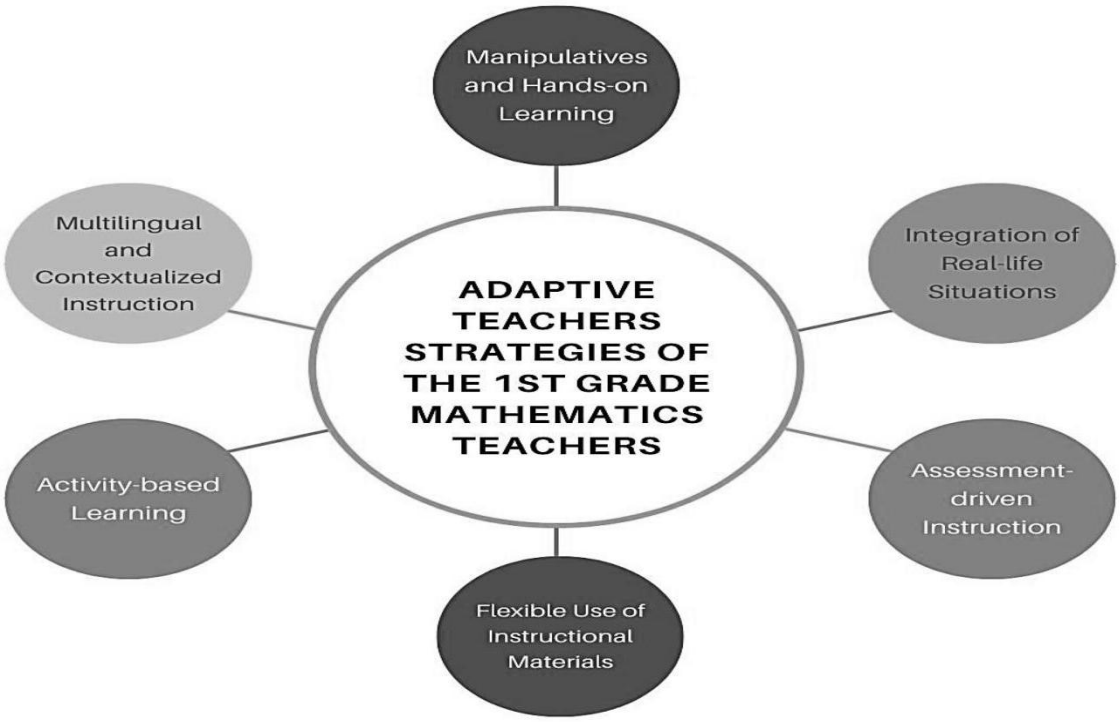

Figure 3: Thematic Diagram on Adaptive Teachers' Strategies of the 1st Grade Mathematics Teachers

Manipulatives and Hands-on Learning

Calculator manipulatives and hands-on mathematics instructions are widely used in different mathematics teaching methodologies in the Matatag Curriculum. For instance, first-grade teachers understand that mathematics concepts are built up more effectively for young children when they have something to manipulate physically. One example is the Concrete-Representational-Abstract (CRA) model, which involves students using manipulatives, followed by a pictorial stage, and finally, going to an abstract stage. This sequence allows students to understand more concepts before encountering mathematical symbols and procedures.

Manipulatives give students a tangible base for mastering math concepts, teachers say. Through manipulatives such as counters, number blocks, and other tangible materials, students come to improve their problem-solving and critical-thinking skills. One teacher said it is harder to understand if they cannot see or touch something.

One participant said that:

"That is why you need visual aids and hands-on activities."[Line 5, Participant 9]

This understanding indicates how manipulatives facilitate optimal cognitive growth for young learners by bridging the gap between tangible real-world items and abstract mathematical concepts.

While manipulatives have a solid impact, they only work when used effectively. Other teachers noted challenges regarding the availability of resources and the need for structured professional development. They emphasized that access to manipulatives and teacher training to incorporate them meaningfully into lessons are critical. In this context, schools must invest in both instructional materials and the capacity of teachers to use manipulatives effectively in student learning.

Integration of Real-Life Situations

Math makes the most sense when it relates to real-world and lived experiences. To make students realize the practical significance of mathematical concepts, first-grade teachers under the Matatag Curriculum implement real-world scenarios. It lets young learners see numbers, measurements, and patterns daily, making lessons more exciting and relatable.

One participant shared that:

"Seeing math integrated into real-life situations make it much more accessible to students. They use it to make sense of what they see and experience."[Line 5, Participant 2]

From this statement, contextualized learning increases students' understanding of the material.

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Teachers are responsible for making math relevant to students by incorporating real-life applications like counting money, measuring ingredients, and telling time into their lesson plans. Because they reflect real-life experiences, word problems lead to critical thinking and engaging problem-solving.

One participant said that:

"We combine math with stories or real-life problems so the students see the implementation,"[Line 5, Participant 7]

Not only does this approach boost engagement, but it also encourages a more intuitive understanding of mathematical concepts.

Real-life applications help mathematics with its existing merits but are best deployed in structured lesson planning. Other teachers mentioned that they require more assistance in planning problem-solving tasks related to curriculum objectives. Teacher training geared toward instructional context strategies might enable educators to craft even more effective real-life math problems that pique curiosity and motivate engagement. This would allow the teacher to observe math in the real world, and this behavior can serve in teaching mathematics, too.

Assessment Driven Instruction

Under the Matatag Curriculum, assessment is an integral process of effective teaching and learning. Teachers of first grade have the benefit of using a variety of formative, summative, and diagnostic assessment data to inform their teaching and track student progress. Assessments that happen continually such as oral tests or daily observations help teachers see where students may be struggling and adapt the learning experience. In contrast, tests at the end of a unit can offer a broader sense of student learning.

One participant said that:

"We evaluate the students every day to see if they grasp each step before we proceed,"[Line 6, Participant 6]

Doing so means instruction meets the needs of students.

Much focus has been put on performance-based assessments in which students show what they know by completing authentic tasks instead of regurgitating facts. This aligns with the goal of the Matatag Curriculum, which is to develop active learning and deeper understanding. However, several teachers mentioned that there is still too much dependence on traditional forms of summative assessment.

One participant revealed that:

"Summative assessments go on record, but we're reviewing performance-based tasks in the classroom to ensure our students can solve problems on their own."[Line 6, Participant 1]

This text demonstrates a move from rote memorization in favor of competency-based assessment models focused on application.

The educational management through the teachers should also explore digital tools that allow real-time feedback to continue enhancing assessment practices. Finally, using structured formative assessment strategies and summative assessments will provide a balanced way to gauge student learning. Moreover, the emphasis on reasoning and problem-solving can extend beyond the realm of mathematics into the real world, where genuine mathematical understanding is needed for opportunities in other fields, which could, in turn, be exploited to help people in need.

Flexible Use of Instructional Materials

From a broader perspective, the instructional materials utilized in mathematics instruction are vital to improving student engagement and understanding. First-grade teachers continuously adapt and modify materials for their student's needs so that resources are accessible and effective for learning. To appeal to varied learning styles, they use traditional textbooks and educator-created learning aids — flashcards, visual charts, and interactive worksheets.

One participant said that:

"Children need concrete materials to learn mathematics," one teacher wrote. *"If not, they might struggle to understand it."* [Line 4, Participant 1]

This realization underpins the need for adaptability in educational resources.

To adapt to changing educational needs, teachers are also creating new teaching resources to support their learning. Many teachers make their activity sheets and manipulatives to cement key mathematical skills. However, some pointed out that funding and resources do not exist to produce high-quality instructional materials.

Another participant declared that:

"This is to create 3D materials and stuff that we create ourselves, but help from the school would make it easier,"[Line 5, Participant 9]

This indicates a need to invest more efficiently in developing instructional materials to provide effective teaching.

Beyond resourcing well, professional development on best practices for using and adapting instructional materials would help teachers prosper. Training on new teaching aids and emerging educational technologies would help improve existing

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instructional materials for more engagement. With the proper support, teachers will keep trying new things to improve students' learning.

Activity-Based Learning

Activity-based learning is one of the main strategies that first-grade teachers use to keep the students' attention and help them learn material. Educators foster a dynamic learning environment that encourages participation using games, interactive exercises, and group activities.

One participant shared that:

"Students learn best when they are engaged in activities in which they think and engage,"[Line 5, Participant 5]

This aligns with how students are taught to be more hands-on and work through meaning-making approaches also known as constructivism.

In traditional learning, teachers often tailor the activities to different learning styles. Mathematical ideas are often playfully introduced through role-playing, solving puzzles, and storytelling. Others incorporate movement-based activities—like hopscotch for number identification—to bolster kinesthetic learning.

Another participant explained that:

"We do a variety of activities to keep the students engaged and ensure that they understand the math in a way that makes sense to them,"[Line 5, Participant 6]

Although it offers several advantages, the skill-based approach to learning is not easy to implement as much planning and extra resources go into it. Teachers said they required more training on creating lesson plans that involve interactive learning and how best to use educational technology to engage students in hands-on learning. Another suggestion is to support ethical and activity-based instruction by implementing professional development for teachers transitioning into this pedagogy. At this time, activity-based learning can be better utilized to give students greater understanding and fun in mathematics.

Multilingual and Contextualized Instruction

This is an important consideration when teaching first graders, who are still working on developing their literacy skills and rely heavily on language to grasp mathematical concepts. Matatag for these teachers refers to using the first language (L1) as the primary medium so that their students will understand better.

One participant said that:

'If we speak in English, the children don't understand. We speak L1 so they can follow the lesson." [Line 1, Participant 8]

This method follows research indicating that children learn best in their first language before moving on to a second one.

While using L1-based instruction can reach comprehension, subject-specific vocabulary bridging English with literal instruction is wearyingly complex. Some teachers said they needed training in code-switching techniques so students could switch between one language and the other as seamlessly as possible.

Another participant explained that:

"We use L1 and English, but finding that balance is hard,"[Line 1, Participant 1]

This emphasizes the importance of structured bilingual education, where effective language acquisition does not come at the cost of math understanding.

To that end, teachers should be provided with professional development programming to support the gradual integration of English — all while keeping the instruction clear. Furthermore, creating strategies that help with language transition, such as developing multilingual teaching resources, can foster inclusivity. By refining multilingual instruction, Educators can navigate language barriers and design students' transformative learning experiences.

The study's findings revealed that first-grade mathematics teachers are flexible and adaptable when implementing the Matatag Curriculum as they focus on student-centered and interactive learning. Overall, the teachers utilize hands-on materials, real-world contexts, assessment-based instruction, flexible resources, activity-based learning experiences, and multilingual

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approaches to produce meaningful mathematical understanding among young children. However, there are a few things that need to be worked on in order to make these instructional strategies more effective.

Much of that includes strengthening manipulative-based, experiential learning. Teachers value the ability of hands-on materials to help students understand abstract concepts, but limited resources and insufficient training inhibit their appropriate use. Professional development can facilitate this by providing teachers with the best practices for effectively utilizing manipulatives. Schools should also have enough instructional materials to support hands-on learning.

Another key area involves improving real-world and contextualized learning. Math teachers recognize that mathematics should be integrated with real life but lack sufficient training to create engaging, real-world math problems relatable to students. Through this process, mathematics comes alive, fostering engagement and understanding.

In assessment, it is crucial to optimize formative assessment practices so that learning does not stagnate. While traditional summative assessments continue as a part of the status quo, they can be fortified with a more streamlined use of technology for real-time formative assessment. More structured formative assessment strategies will give immediate knowledge of student learning and allow you to make instructional changes more quickly.

Access to instructional materials needs improvement. While many teachers develop and customize their teaching resources, financial and logistical challenges often constrain resource collection. Different schools and districts could also use some money to provide teachers with instructional material budgets and incentivize teachers to collaborate and co-create new lesson plans and tools.

Advocacy for multilingual and inclusive education works towards the understanding and engagement of young learners. Teachers recognize the need to use the student's first language (L1) in instruction yet struggle to incorporate L1 in a way that does not detract from English language development. Training on code-switching techniques can help teachers make this transition between languages seamless so the student can pick up on both facets of learning: math skills and linguistic abilities at the same time.

These findings indicate that first-grade mathematics teachers are adaptable in implementing the Matatag Curriculum, but these shortcomings must be addressed to improve instruction globally. Schools can enhance the learning experience of young learners by strengthening hands-on learning, placing math lessons in context, optimizing assessments, improving instructional resources, and supporting multilingual education.

CONCLUSION

The Matatag Curriculum significantly differs from how mathematics is taught and learned in the first grade. The current study investigated first-grade mathematics teachers' perceptions, readiness, and methods for transitioning to such a curriculum framework. The results highlight a nuanced picture, where the educators recognize the curriculum's strengths and simultaneously navigate challenges to its effectiveness.

First-grade mathematics teachers note the Matatag Curriculum as positive because it provides a more relevant and realistic approach to mathematics. This practical approach in the curriculum helps students relate to mathematics as a critical life skill instead of a disconnected subject. Teachers said this approach promotes more profound understanding and interest, mainly when lessons are based on familiar experiences. Moreover, HOTS problems expose students to reflection and analysis instead of rote concepts. Some teachers had difficulty fitting the new curriculum into their plans, particularly regarding the depth of competencies and the ability to accommodate all the different levels of students. The spiral progression of concepts that repeat in learning ensures that the students will remember repeating concepts well. However, this has to be nuanced to accommodate struggling and advanced learners. In addition, teachers called for more precise directions and structured training to implement the new curriculum approach.

Preparations made by the teachers for the shift to the Matatag Curriculum were monumental. The success in adopting the new methodologies rested on the critical need for professional development to help educators implement them appropriately. Although the initial training sessions laid the groundwork, teachers reported a need for continuous training and support to improve their teaching practices further. Teachers also shared the value of collegial collaboration and mentoring, which formed informal yet invaluable support structures during the transition. Another key part of the preparation was having teaching resources. Teachers also identified a lack of access to localized instructional materials as another challenge keeping them from successfully implementing the curriculum as envisioned. Teaching aids were not readily available in the local language, either. This is important so techniques are applied consistently and effectively across disparate schools and regions.

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Teachers have adopted various adaptive strategies to improve their instruction in response to addressing the nuances of the Matatag Curriculum. The difficulty allowed educators to strengthen students' comprehension of abstract mathematics by providing hands-on learning opportunities using manipulatives. To get there, the participants used a common strategy known as the CRA approach to teaching math, where you go from concrete experiences to abstract reasoning. The other primary strategy that was applied was differentiated teaching, which let teachers customize lessons based on the varying needs of their students. Through peer-assisted learning, small-group instruction, and extra individualized support, teachers successfully helped all students — no matter how quickly (or slowly) they learned — get to the point where they could manipulate mathematical concepts with understanding. Using code-switching and first-language instruction was a good strategy because it helped younger learners transition to dealing with abstract mathematical concepts. Moreover, teachers supported their decisions based on educational assessments. Formative assessments allow teachers to see learning in real-time and adjust instruction accordingly, teachers said. However, the research also highlighted a demand for better-used digital tools and structured assessment frameworks, which would deliver a more holistic view of the learning experience when combined with summative assessments.

These findings highlight the strengths and room for improvement in terms of the implementation of the Matatag Curriculum. They see the promise of the curriculum in helping to develop a better understanding of math using real-life contexts, higher-order thinking skills, and hands-on learning. However, this success requires addressing the challenges teachers encounter, especially around professional development in new tools, access to resources, and types of instructional support.

There should be continued investments in teacher education and structured mentor programs to cater to the Matatag Curriculum objectives. The government and educational institutions must ensure large amounts of funding are allocated for high-quality schooling resources to all schools, more so the resources that can be localized and contextualized. In addition, by creating a system of teamwork among educators, the instructional program will be more robust, and teachers will share excellent practices and innovative teaching approaches. This might be just another curriculum with another dull direction and remain useless without a goal if the hungry teachers are not prepared. Addressing the challenges identified in this study would help policymakers and educational leaders create conditions that support teachers when providing high-quality mathematics education to young learners. The Matatag Curriculum, with continued refinement and micromanagement, can build a solid foundation of mathematical proficiency and analytical acumen within the Philippine classroom.

RECOMMENDATIONS

In light of the findings and conclusions, the following are the recommendations of the study.

1. The Department of Education (DepEd) must ensure that teachers are given continuous and structured training and capacity-building programs to enrich their skills, competencies, and methodologies as described in the Matatag Curriculum. The training sessions should be hands-on learning workshops, peer mentoring, and sharing of best practices so that teachers can successfully incorporate manipulatives, real-world applications, and differentiated instruction into their teaching. Training on code-switching skills, multilingual teaching strategies, and techniques to help diverse learners should also be embedded in this process.

2. The government must provide more funding and resources for schools with manipulatives, localized teaching materials, and digital learning resources. Hence, schools should have contextualized learning aids in the CRA (Concrete-Representational-Abstract). Through this repository, DepEd will be able to assist teachers in acquiring lesson plans, assessment tools, and interactive digital resources that are compatible with the Matatag Curriculum.

3. Collaboration among teachers and building teacher support networks is critical. Involving teachers in best practices and new curriculum challenges takes time, but schools must also implement professional learning communities (PLCs) so teachers can routinely collaborate and support each other. Peer-coaching and mentoring programs should also be instituted by DepEd so that more seasoned teachers coach those still getting the feel of the methodologies of the curriculum. There needs to be a collaborative effort between schools to help share opportunities to expand effective practices in teaching and learning, including teaching strategies, lesson plans, and assessment methods.

4. Schools should implement formative assessment systems that offer students immediate information on their progress so that teachers can adapt their instruction to the learning needs of students in real-time. So, exploring their integration should be done to track progress and facilitate a personalized learning environment. This includes establishing a clear and systematic approach to evaluation and ensuring student learning is assessed in formative and summative approach.

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5. Adequate time and support should be made available so that teachers can get fully acquainted with the new curriculum across grade levels before the classroom implementation begins. The Matatag Curriculum must be flexible and adaptable so that teachers may modify a given approach to instruction depending on their students' needs. DepEd must hold regular feedback discussions with teachers to assess the effectiveness of the curriculum and make adjustments based on real classroom experiences.

6. A focus on integrating multilingual and inclusive instruction is essential. Also, they should be trained on multilingual education strategies, including how to implement code-switching and L1-based instruction, to facilitate student understanding. Further research and pilot programs will need to explore best practices for supporting students as they move from their first language (L1) to English in a manner that preserves conceptual understanding. Additionally, the students who have difficulty understanding mathematical concepts should be offered intervention programs and support through inclusive education practices by schools.

7. The teachers should be well-trained and given the proper materials and redesigned syllabi to support the success of the Matatag Curriculum. The Department of Education must ensure that every teacher has been given the chance to receive training, materials, and funding. Instead, policymakers should stay in close touch with teachers and school administrators, allowing the curriculum to be continuously refined and tuned based on how it plays in classrooms and the challenges teachers face. Longitudinal studies assessing the long-term effectiveness of the Matatag Curriculum on students learning trajectories and teacher effectiveness would also be beneficial.

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