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Pedagogical Practices in Teaching Grade 6 Mathematics under the MATATAG Curriculum: Teachers' Experiences in Villa Aurora Elementary School of Diadi District, Schools Division of Nueva Vizcaya

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Abstract

The implementation of the MATATAG Curriculum has introduced significant changes in mathematics instruction by emphasizing foundational numeracy, learner-centered pedagogy, and contextualized learning experiences. This study explored the pedagogical practices and teaching experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya. A qualitative phenomenological research design was employed involving eight Grade 6 Mathematics teachers selected through purposive sampling. Data were gathered through semi-structured interviews, classroom observations, and document analysis and were analyzed using Braun and Clarke's thematic analysis. The findings revealed that teachers employed contextualized instruction, differentiated teaching strategies, collaborative and problem-based learning, formative assessment, and reflective teaching practices to support learners' mathematical understanding. Despite challenges related to curriculum transition, diverse learner abilities, and limited instructional resources, teachers demonstrated adaptability and commitment to effective mathematics instruction. The study highlights the importance of continuous professional development, adequate instructional support, and collaborative learning communities in ensuring the successful implementation of the MATATAG Curriculum. The findings may serve as a basis for improving mathematics instruction, teacher training programs, and curriculum implementation in public elementary schools.

Keywords: MATATAG Curriculum, Mathematics education, pedagogical practices, Grade 6 Mathematics, teachers' experiences, qualitative research, phenomenology



1. Introduction

Mathematics plays a vital role in developing learners' logical reasoning, problem-solving abilities, critical thinking, and decision-making skills necessary for lifelong learning. As one of the core learning areas in basic education, mathematics provides learners with essential competencies that enable them to solve real-life problems and prepare for higher levels of education. Recognizing the need to strengthen foundational learning, the Department of Education introduced the **MATATAG Curriculum**, which simplifies learning competencies, prioritizes foundational numeracy, and promotes learner-centered and contextualized instruction.

The successful implementation of the MATATAG Curriculum largely depends on teachers, who are responsible for translating curriculum standards into meaningful classroom learning experiences. Grade 6 Mathematics teachers are expected to employ effective pedagogical practices that encourage conceptual understanding, mathematical reasoning, collaboration, and active learner participation. They are likewise expected to utilize formative assessment, differentiated instruction, and contextualized learning activities that address the diverse needs of learners while achieving the intended learning competencies.

However, implementing the MATATAG Curriculum also presents several challenges. Teachers experience adjustments in instructional planning, assessment practices, classroom management, and the selection of appropriate teaching strategies. Differences in learners' mathematical abilities, limited instructional resources, and the transition to a revised curriculum further influence teachers' classroom practices and instructional decisions. These experiences shape how teachers facilitate mathematics learning and respond to the demands of curriculum reform.

Although studies have examined mathematics teaching strategies and curriculum implementation, limited qualitative research has explored teachers' lived experiences in implementing the MATATAG Curriculum in elementary mathematics classrooms. Understanding these experiences is essential for identifying effective pedagogical practices and informing future teacher professional development initiatives.

Therefore, this study explored the pedagogical practices and experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya. The findings are expected to contribute to the improvement of mathematics instruction, strengthen teacher support programs, and provide insights for curriculum implementation in Philippine public elementary schools.

2. Objectives of the Study

This study aimed to explore the pedagogical practices and teaching experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya.

Specifically, it sought to:

1. describe the pedagogical practices employed by Grade 6 Mathematics teachers under the MATATAG Curriculum;
2. explore the teaching experiences of teachers in implementing the MATATAG Curriculum in Mathematics;
3. identify the challenges encountered by teachers in teaching Grade 6 Mathematics under the MATATAG Curriculum;
4. determine the strategies employed by teachers in addressing instructional and classroom challenges; and
5. provide implications for strengthening mathematics instruction and supporting the effective implementation of the MATATAG Curriculum.

3. Review of Related Literature

The MATATAG Curriculum was developed by the Department of Education to improve the quality of basic education by decongesting learning competencies and strengthening foundational skills in literacy, numeracy, and critical thinking. In mathematics, the curriculum emphasizes conceptual understanding, problem-solving, reasoning, and the application of mathematical concepts to authentic situations. Teachers are encouraged to implement learner-centered and contextualized instructional approaches that actively engage learners in the learning process.

Research indicates that effective mathematics instruction is characterized by the use of varied pedagogical approaches that promote active participation and conceptual understanding. Inquiry-based learning, collaborative learning, problem-based instruction, and differentiated teaching have been shown to improve learners' mathematical achievement, confidence, and critical thinking skills. These approaches encourage learners to explore mathematical ideas, justify their solutions, and communicate their reasoning with peers.

Contextualized teaching has likewise been recognized as an effective instructional practice in mathematics education. By connecting mathematical concepts to learners' daily experiences and community contexts, teachers help learners appreciate the relevance of mathematics in solving real-life problems. Studies have shown that contextualized learning

enhances learner motivation, engagement, and retention of mathematical concepts, particularly among elementary learners.

Another essential component of effective mathematics teaching is formative assessment. Continuous assessment enables teachers to monitor learners' progress, identify misconceptions, and provide timely feedback that supports learning. The use of questioning, classroom discussions, performance tasks, and reflective activities allows teachers to adjust instruction according to learners' needs and improve learning outcomes.

Despite these effective instructional practices, teachers continue to encounter challenges in implementing curriculum reforms. Studies have reported that curriculum transitions often require teachers to adjust lesson planning, instructional strategies, assessment practices, and classroom management. Limited instructional resources, varying learner abilities, and insufficient professional development opportunities may also affect the successful implementation of new curricula. Nevertheless, teachers' professional commitment, reflective practice, and collaboration with colleagues contribute significantly to overcoming these challenges and sustaining effective mathematics instruction.

Although several studies have examined mathematics pedagogy and curriculum implementation, limited qualitative research has explored the lived experiences of Grade 6 Mathematics teachers implementing the MATATAG Curriculum in Philippine public elementary schools. This study addresses this gap by examining the pedagogical practices, instructional experiences, and challenges of teachers at Villa Aurora Elementary School, providing insights that may inform teacher professional development and strengthen the implementation of the MATATAG Curriculum.

4. Theoretical Framework

This study is anchored on **Constructivist Learning Theory** by Jean Piaget, **Social Constructivism** by Lev Vygotsky, and **Experiential Learning Theory** by David Kolb. These theories explain how learners construct mathematical knowledge through meaningful experiences, social interaction, and active engagement.

Constructivist Learning Theory posits that learners actively construct knowledge by relating new mathematical concepts to their prior experiences (Piaget, 1972). In the context of the MATATAG Curriculum, teachers facilitate learning by providing activities that encourage learners to explore mathematical ideas, solve problems, and develop conceptual understanding rather than relying on rote memorization.

Vygotsky's Social Constructivism emphasizes that learning occurs through collaboration, dialogue, and guided interaction with teachers and peers (Vygotsky, 1978). This theory supports the use of cooperative learning, classroom discussions, peer tutoring, and teacher

scaffolding, which are essential pedagogical practices in mathematics instruction under the MATATAG Curriculum.

Kolb's Experiential Learning Theory explains that meaningful learning takes place through concrete experiences, reflection, conceptualization, and application (Kolb, 1984). Mathematics teachers promote experiential learning by engaging learners in contextualized activities, real-life problem-solving tasks, manipulative-based instruction, and reflective exercises that strengthen mathematical understanding.

These theories provide the foundation for examining the pedagogical practices and teaching experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum and explain how learner-centered instruction contributes to meaningful mathematics learning.

5. Methodology

This study employed a qualitative phenomenological research design to explore the pedagogical practices and teaching experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya. The phenomenological approach was selected because it focuses on understanding the lived experiences and perspectives of teachers regarding a particular educational phenomenon.

The study was conducted at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya. The participants consisted of eight (8) Grade 6 Mathematics teachers who were directly involved in implementing the MATATAG Curriculum. They were selected using purposive sampling, ensuring that each participant possessed sufficient teaching experience and firsthand knowledge of the curriculum implementation.

Data were gathered through researcher-developed semi-structured interviews, supported by classroom observations and document analysis of lesson plans, learning materials, and assessment tools. Prior to data collection, permission was secured from the Schools Division Office and the school administration. Informed consent was obtained from all participants, and interviews were conducted individually, audio-recorded with permission, and transcribed verbatim for analysis.

The collected data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis, which involved familiarization with the data, coding, generating themes, reviewing themes, defining and naming themes, and producing the final report. This method enabled the identification of recurring patterns that reflected the teachers' pedagogical practices, instructional experiences, challenges, and coping strategies.

To ensure the trustworthiness of the findings, the study employed credibility, transferability, dependability, and confirmability. Credibility was established through member checking and triangulation of interview, observation, and document analysis data. Dependability and confirmability were strengthened through peer debriefing and maintaining an audit trail, while thick descriptions of the research context enhanced the transferability of the findings.

Ethical principles were strictly observed throughout the study. Approval was obtained from the appropriate authorities before data collection. Participation was voluntary, and all participants signed informed consent forms. Confidentiality and anonymity were maintained through the use of pseudonyms, and all information gathered was used solely for academic and research purposes.

6. Findings and Discussion

Theme 1: Contextualizing Mathematics Lessons to Enhance Learners' Understanding

The participants consistently emphasized the importance of contextualizing mathematics lessons by relating mathematical concepts to learners' daily experiences. They explained that the MATATAG Curriculum encourages teachers to use real-life situations and local contexts to make mathematical concepts more meaningful and understandable. By connecting lessons to familiar experiences, learners became more engaged and demonstrated better conceptual understanding.

Participant 2 shared, *"I always relate mathematics lessons to situations that my pupils encounter every day, such as buying goods, measuring ingredients, or budgeting money. They understand the lesson more when they can relate it to real life."*

Participant 5 stated, *"Using examples from our community makes mathematics easier for learners because they can immediately see the importance of what they are learning."*

These responses indicate that contextualized instruction promotes meaningful learning by connecting abstract mathematical concepts with authentic experiences. The findings support Constructivist Learning Theory, which emphasizes that learners construct knowledge through meaningful experiences (Piaget, 1972). They also align with the MATATAG Curriculum's emphasis on contextualized and learner-centered instruction.

Theme 2: Utilizing Differentiated Instruction to Address Diverse Learning Needs

The participants acknowledged that learners possess varying mathematical abilities, requiring teachers to employ differentiated instructional strategies. They modified learning activities, provided additional practice exercises, and adjusted instructional approaches according to learners' readiness and learning pace.

Participant 1 explained, *"Not all learners understand the lesson at the same time, so I prepare activities with different levels of difficulty and provide additional guidance to those who need more support."*

Participant 7 remarked, *"I group learners according to their needs and allow peer tutoring so that they can help one another understand difficult mathematical concepts."*

These findings demonstrate that differentiated instruction enables teachers to address learners' diverse needs while promoting inclusive classroom participation. Consistent with Vygotsky's Social Constructivism, teacher scaffolding and peer collaboration facilitate learners' mathematical development within their zone of proximal development (Vygotsky, 1978).

Theme 3: Promoting Collaborative and Problem-Based Learning

Teachers highlighted collaborative and problem-based learning as effective pedagogical practices under the MATATAG Curriculum. They encouraged learners to work in groups, discuss mathematical solutions, and solve authentic problems that required critical thinking and reasoning.

Participant 3 stated, *"I let my pupils solve problems together because they learn different strategies from one another and become more confident in explaining their answers."*

Participant 6 shared, *"Instead of simply giving formulas, I present real-life situations that require learners to analyze and find appropriate mathematical solutions."*

These responses suggest that collaborative and problem-based learning strengthen learners' communication, reasoning, and problem-solving skills. The findings support experiential and constructivist approaches, which emphasize active learner participation and knowledge construction through authentic learning experiences (Kolb, 1984).

Theme 4: Using Formative Assessment to Improve Learning

The participants described formative assessment as an essential component of mathematics instruction under the MATATAG Curriculum. They regularly used questioning, short quizzes, performance tasks, classroom discussions, and observation to monitor learners' understanding and provide immediate feedback.

Participant 4 explained, *"I assess my learners every lesson through oral questioning and short activities so I know who needs additional support before moving to the next topic."*

Participant 8 stated, *"Immediate feedback helps learners recognize their mistakes and gives me the opportunity to adjust my teaching strategies."*

These findings reveal that continuous assessment allows teachers to identify misconceptions and improve instruction. They are consistent with the MATATAG Curriculum's emphasis on assessment for learning and with studies highlighting the effectiveness of formative assessment in improving mathematics achievement and learner engagement.

Theme 5: Demonstrating Adaptability and Reflective Teaching during MATATAG Curriculum Implementation

The participants recognized that implementing the MATATAG Curriculum required continuous adjustment in lesson planning, instructional strategies, and assessment practices. Despite challenges such as curriculum transition, varying learner abilities, and limited instructional resources, they demonstrated resilience, adaptability, and commitment to professional growth.

Participant 5 shared, *"The MATATAG Curriculum required us to adjust our lesson planning, but continuous learning and collaboration with fellow teachers helped us improve our teaching."*

Participant 8 remarked, *"Every class is different. After every lesson, I reflect on what worked and what needs improvement so I can better help my learners."*

These responses demonstrate that reflective practice enables teachers to improve instructional effectiveness and respond to changing classroom needs. The findings support the importance of continuous professional learning and reflective teaching in successfully implementing curriculum reforms. Previous studies likewise emphasize that reflective educators are better able to adapt instructional practices and enhance learner outcomes during periods of educational change.

7. Conclusion

This study explored the pedagogical practices and teaching experiences of Grade 6 Mathematics teachers in implementing the MATATAG Curriculum at Villa Aurora Elementary School, Diadi District, Schools Division of Nueva Vizcaya. The findings revealed that teachers effectively implemented contextualized instruction, differentiated teaching, collaborative and problem-based learning, formative assessment, and reflective teaching practices to promote learners' mathematical understanding. Despite challenges brought about by curriculum transition, diverse learner needs, and limited instructional resources, the participants demonstrated adaptability, creativity, and commitment to delivering quality mathematics instruction. Their experiences highlight the importance of learner-centered pedagogies and continuous professional growth in ensuring the successful implementation of the MATATAG Curriculum. Overall, effective mathematics teaching under the MATATAG Curriculum depends on teachers' ability to create meaningful learning experiences that

develop learners' conceptual understanding, problem-solving skills, and positive attitudes toward mathematics.

8. Implications

The findings of this study provide valuable implications for educational practice and policy. School administrators should strengthen support for teachers by providing continuous professional development programs focusing on contextualized instruction, differentiated teaching, formative assessment, and problem-based learning aligned with the MATATAG Curriculum. Greater investment in instructional resources and mathematics manipulatives may further enhance classroom instruction and learner engagement. Teachers are encouraged to continue practicing reflective teaching and collaborating through Learning Action Cells (LACs) and professional learning communities to share effective pedagogical practices. Curriculum developers may use the findings to refine instructional guides and learning resources that support the effective implementation of the MATATAG Curriculum. Future researchers may conduct similar studies in other schools and divisions using larger samples or mixed-methods approaches to further examine mathematics instruction under the revised curriculum.

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