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Teachers' Experiences and Instructional Practices in the Implementation of Science 5 Under the MATATAG Curriculum in Legislative District IV, Schools Division of Isabela

Jaquilyn V. Fabian, Anne Grace D. Pascual

Northeastern College, Santiago City, Philippines Cordon South Central School-Main

Abstract

The implementation of the MATATAG Curriculum in Philippine basic education introduced significant instructional reforms aimed at strengthening foundational competencies, contextualized learning, and learner-centered pedagogical practices. This qualitative study explored the experiences, instructional practices, and implementation challenges encountered by Science 5 teachers under the MATATAG Curriculum in Legislative District IV, Schools Division of Isabela. Utilizing a phenomenological qualitative research design, the study examined how teachers interpret, implement, and adapt Science 5 instruction within the framework of the revised curriculum. Data were gathered through semi-structured interviews, focus group discussions, classroom observations, and document analysis involving twelve purposively selected Science 5 teachers from public elementary schools. Thematic analysis following Braun and Clarke's framework was employed in analyzing the data. Findings revealed five major themes: (1) Curriculum Adaptation and Instructional Transition Under the MATATAG Framework; (2) Learner-Centered and Inquiry-Based Science Pedagogies; (3) Contextualization and Localization of Science Instruction; (4) Instructional Challenges and Resource Constraints in Curriculum Implementation; and (5) Teacher Resilience, Professional Adjustment, and Pedagogical Innovation. Participants emphasized the importance of simplified competencies, experiential learning, and contextualized science instruction in enhancing learner engagement and conceptual understanding. However, teachers also encountered challenges related to limited instructional materials, insufficient curriculum orientation, time constraints, diverse learner abilities, and adjustment to revised teaching expectations. Despite these challenges, teachers demonstrated adaptability, creativity, and professional commitment in implementing the Science 5 MATATAG Curriculum. The study concludes that successful curriculum implementation requires sustained institutional support, teacher professional development, contextualized instructional resources, and collaborative instructional planning. Findings provide implications for curriculum policy enhancement, science education reform, and teacher support systems in elementary education.

Keywords: MATATAG Curriculum, science education, curriculum implementation, instructional practices, teacher experiences, elementary education, qualitative research

*Corresponding author: sjaquilyn.fabian@deped.gov.ph | annegrace0313@gmail.com

INTRODUCTION

Curriculum reform remains a significant educational undertaking aimed at improving learning quality, strengthening foundational competencies, and responding to evolving societal and educational demands. In the Philippines, the Department of Education introduced the MATATAG Curriculum as part of broader educational reforms intended to address curriculum congestion, improve foundational learning, and promote learner-centered, inclusive, and contextualized education. The MATATAG Curriculum emphasizes essential learning competencies, strengthened literacy and numeracy, contextualized instruction, and holistic learner development.

Within elementary science education, the MATATAG Curriculum seeks to enhance learners' scientific literacy, inquiry skills, critical thinking, and environmental awareness through simplified yet meaningful science competencies. Science 5 instruction under the MATATAG Curriculum emphasizes active learner participation, contextualized science learning, inquiry-based pedagogies, and practical applications of scientific concepts. Consequently, teachers are expected to adopt learner-centered instructional approaches that facilitate deeper conceptual understanding and meaningful classroom engagement.

Teachers play a central role in curriculum implementation. Their pedagogical decisions, classroom strategies, professional interpretations, and instructional adaptations significantly influence the success of educational reforms. However, curriculum transitions often require teachers to adjust instructional practices, redesign lesson delivery, and respond to emerging classroom challenges associated with new curricular expectations. In many public elementary schools, particularly in rural educational settings, teachers encounter additional implementation difficulties related to limited resources, insufficient training, large class sizes, and varying learner abilities.

The implementation of Science 5 under the MATATAG Curriculum in Legislative District IV, Schools Division of Isabela presents unique instructional realities and contextual experiences among elementary science teachers. Schools within the district differ in terms of instructional facilities, learner populations, and access to science resources, affecting how teachers implement curriculum reforms within their classrooms.

Despite the significance of the MATATAG Curriculum, limited qualitative studies have explored teachers' lived experiences, pedagogical practices, and implementation challenges in Science 5 instruction under the revised curriculum framework. Existing discussions often focus on policy-level analyses rather than the actual instructional experiences and classroom realities of teachers implementing the curriculum.

Thus, this study explored the experiences and instructional practices of Science 5 teachers in the implementation of the MATATAG Curriculum in Legislative District IV, Schools Division of Isabela. Specifically, the study sought to answer the following questions:

1. How do Science 5 teachers describe their experiences in implementing the MATATAG Curriculum?
2. What instructional practices and pedagogical approaches do teachers utilize in Science 5 instruction under the MATATAG Curriculum?
3. What challenges do teachers encounter in implementing Science 5 under the revised curriculum?
4. How do teachers adapt and respond to instructional and curriculum implementation challenges?

5. What insights may be drawn from teachers' experiences regarding effective implementation of the MATATAG Science Curriculum?

The findings of the study may contribute to curriculum enhancement, science teacher professional development, instructional support systems, and educational policy implementation related to the MATATAG Curriculum.

REVIEW OF RELATED LITERATURE

Curriculum Reform and the MATATAG Curriculum

Curriculum reform aims to improve educational quality by revising learning competencies, instructional practices, and educational standards. The MATATAG Curriculum was introduced to decongest the Philippine basic education curriculum and strengthen foundational learning competencies among learners. According to the Department of Education (2023), the curriculum prioritizes literacy, numeracy, contextualized learning, and learner-centered educational experiences.

The MATATAG framework emphasizes the development of lifelong learners through meaningful learning experiences, simplified competencies, and inclusive educational practices. Teachers are expected to facilitate active participation, critical thinking, and inquiry-based learning within classroom instruction.

Science Education and Inquiry-Based Learning

Science instruction emphasizes inquiry, experimentation, observation, and critical thinking. Inquiry-based learning encourages learners to investigate scientific phenomena through questioning, exploration, and collaborative problem-solving. According to the National Research Council (2020), science classrooms become more effective when learners actively engage in scientific inquiry and experiential learning activities.

Constructivist learning principles further emphasize that learners construct knowledge through meaningful interaction, reflection, and social engagement. According to Lev Vygotsky, learning occurs through social interaction and guided experiences that support cognitive development. Science instruction therefore requires learner-centered pedagogies that encourage active participation and conceptual understanding.

Contextualized and Learner-Centered Science Instruction

Contextualized instruction connects scientific concepts to learners' local experiences, community realities, and environmental contexts. In elementary science education, contextualized pedagogies strengthen learner engagement and conceptual understanding by making scientific ideas more meaningful and relatable.

According to Geneva Gay, culturally responsive and learner-centered pedagogies promote active engagement, inclusivity, and meaningful learning experiences. Teachers who contextualize science instruction using local examples, environmental observations, and practical activities create more effective and engaging classroom environments.

Challenges in Curriculum Implementation

Curriculum implementation often presents instructional challenges related to teacher preparedness, instructional materials, time allocation, learner diversity, and institutional support. According to Fullan (2019), educational reforms become effective only when teachers receive adequate support, professional development, and implementation resources. Science teachers in rural public schools frequently encounter limited laboratory facilities,

insufficient science materials, overcrowded classrooms, and varying learner abilities. Such constraints influence instructional effectiveness and teachers' ability to fully implement inquiry-based science pedagogies.

THEORETICAL FRAMEWORK

This study was anchored on Constructivist Learning Theory proposed by Lev Vygotsky, which posits that learners actively construct knowledge through social interaction, collaboration, and meaningful experiences. The study also utilized Experiential Learning Theory developed by David Kolb, emphasizing learning through concrete experiences, reflection, and application.

These theories guided the interpretation of teachers' instructional practices, curriculum implementation experiences, learner engagement strategies, and classroom adaptations under the MATATAG Curriculum.

METHODOLOGY

This study utilized a qualitative phenomenological research design to explore the lived experiences, instructional practices, and implementation challenges encountered by Science 5 teachers under the MATATAG Curriculum. Phenomenology was appropriate because it enabled the researcher to understand teachers' perspectives, pedagogical adjustments, and classroom realities within the context of curriculum reform implementation.

The study was conducted in selected public elementary schools in Legislative District IV, Schools Division of Isabela. The locale was selected because of its active implementation of the MATATAG Curriculum and its diverse rural educational contexts that provided meaningful insights into curriculum implementation experiences.

The participants consisted of twelve Science 5 teachers selected through purposive sampling. Participants met the following criteria: currently teaching Science 5 under the MATATAG Curriculum, possessing at least three years of teaching experience, directly involved in curriculum implementation, and willing to participate in interviews and classroom observations.

Data were gathered through semi-structured interviews, focus group discussions, classroom observations, and document analysis of lesson plans and instructional materials. The interview guide focused on teachers' instructional experiences, pedagogical strategies, curriculum implementation practices, learner engagement, classroom challenges, and professional reflections regarding Science 5 instruction under the MATATAG Curriculum.

Ethical considerations including informed consent, confidentiality, anonymity, voluntary participation, and respect for participants' perspectives were strictly observed throughout the research process.

Data were analyzed using thematic analysis following Braun and Clarke's (2006) framework. Interview transcripts, observation notes, and instructional documents were coded and categorized to identify recurring themes and patterns related to curriculum implementation experiences. Trustworthiness was ensured through triangulation, member checking, peer debriefing, and prolonged engagement within the research setting.

RESULTS AND DISCUSSION

Theme 1: Curriculum Adaptation and Instructional Transition Under the MATATAG Framework

Participants described the implementation of the MATATAG Curriculum as a significant instructional transition requiring pedagogical adjustment and curriculum adaptation. Teachers explained that the revised curriculum simplified competencies and emphasized mastery of essential science concepts.

One participant shared:

"Mas focused na ngayon ang competencies kaya mas nabibigyan ng emphasis ang essential learning."

Another participant remarked:

"Nag-adjust talaga kami sa pacing at paraan ng pagtuturo dahil iba na ang expectations sa MATATAG Curriculum."

Teachers described the need to redesign lesson plans, instructional pacing, and classroom activities to align with revised curriculum standards. Participants acknowledged that while the curriculum reduced content congestion, adapting to new instructional expectations required continuous adjustment and professional learning.

These findings suggest that curriculum reform significantly affects teachers' instructional planning and pedagogical decision-making processes.

Theme 2: Learner-Centered and Inquiry-Based Science Pedagogies

Participants emphasized the use of learner-centered and inquiry-based pedagogical approaches in Science 5 instruction. Teachers utilized collaborative activities, practical demonstrations, experiments, questioning strategies, and inquiry-oriented discussions to promote learner engagement.

One participant stated:

"Mas active ang learners kapag inquiry-based ang activities at sila mismo ang nagdi-discover."

Another participant explained:

"Hands-on activities at group work ang madalas naming gamitin para mas maintindihan nila ang science concepts."

Classroom observations revealed active learner participation during experiments, collaborative investigations, and contextualized science discussions. Teachers encouraged learners to observe, analyze, and reflect on scientific phenomena through experiential learning activities.

These findings align with constructivist and experiential learning theories emphasizing active learner participation and knowledge construction through meaningful experiences.

Theme 3: Contextualization and Localization of Science Instruction

Teachers highlighted the importance of contextualizing science lessons using local environmental examples, community experiences, and familiar situations relevant to learners' daily lives.

One participant shared:

"Mas naiintindihan ng learners ang science kapag local examples ang ginagamit."

Another participant remarked:

"Ginagamit namin ang community environment bilang halimbawa sa lessons para mas relatable."

Participants explained that contextualized instruction strengthened learner understanding, classroom participation, and appreciation of science concepts. Teachers integrated examples

related to agriculture, weather conditions, environmental conservation, and local community practices into science discussions.

The findings support culturally responsive and contextualized pedagogies emphasizing meaningful and relevant science learning experiences.

Theme 4: Instructional Challenges and Resource Constraints in Curriculum Implementation

Despite positive instructional experiences, participants encountered challenges related to limited science materials, insufficient training, lack of laboratory facilities, time constraints, and varying learner abilities.

One participant explained:

"Kulang pa rin ang materials at resources para sa ibang science activities."

Another teacher shared:

"Minsan mahirap i-implement ang activities dahil kulang sa oras at kagamitan."

Teachers also described challenges related to overcrowded classrooms, learners' reading comprehension difficulties, and adjustment to revised assessment expectations under the MATATAG Curriculum.

These findings indicate that effective curriculum implementation requires adequate instructional resources, institutional support, and sustained teacher preparation.

Theme 5: Teacher Resilience, Professional Adjustment, and Pedagogical Innovation

Participants demonstrated resilience, adaptability, and creativity in responding to curriculum implementation challenges. Teachers utilized improvised instructional materials, collaborative planning, multimedia resources, and differentiated instruction to sustain meaningful science learning.

One participant stated:

"Kahit limitado ang resources, gumagawa kami ng paraan para maging engaging ang lessons."

Another participant remarked:

"Patuloy kaming nag-aadjust at natututo para maayos naming maipatupad ang curriculum."

Teachers expressed commitment to professional growth and continuous improvement despite instructional and contextual challenges. Participants recognized the importance of collaboration, adaptability, and innovation in successful curriculum implementation.

These findings demonstrate that teacher resilience and professional commitment significantly contribute to sustaining effective educational reform implementation.

CONCLUSION AND IMPLICATIONS

The study revealed that the implementation of Science 5 under the MATATAG Curriculum in Legislative District IV, Schools Division of Isabela is characterized by instructional adaptation, learner-centered pedagogies, contextualized science instruction, and teacher resilience amidst curriculum transition.

Teachers emphasized the importance of inquiry-based learning, experiential activities, and contextualized instruction in promoting learner engagement and conceptual understanding. However, implementation challenges related to insufficient instructional materials, limited science resources, time constraints, and varying learner needs continue to affect curriculum delivery.

Despite these difficulties, Science 5 teachers demonstrated adaptability, creativity, and strong professional commitment in implementing the revised curriculum. Their experiences highlight the critical role of teacher preparedness, institutional support, and collaborative professional learning in successful curriculum reform implementation.

The findings further suggest that strengthening MATATAG Curriculum implementation requires sustained teacher training, improved instructional resources, contextualized science materials, and supportive educational leadership.

Implications of the Study

The findings imply the need for strengthened teacher professional development programs focusing on inquiry-based science instruction, contextualized pedagogies, curriculum adaptation, and assessment practices under the MATATAG Curriculum.

Educational institutions and policymakers may improve curriculum implementation by providing adequate science materials, laboratory facilities, instructional resources, and sustained curriculum orientation programs for teachers.

School administrators may also promote collaborative instructional planning, mentoring systems, and peer learning communities among Science teachers to strengthen curriculum implementation practices.

Future studies may further explore learners' experiences, curriculum assessment outcomes, and comparative implementation practices across different educational contexts to deepen understanding of MATATAG Curriculum implementation in science education.

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