



SCIENCE TEACHERS' EXPERIENCES IN THE IMPLEMENTATION OF THE MATATAG CURRICULUM IN AN EXTRA-LARGE HIGH SCHOOL: BASES FOR IN-SERVICE TRAINING PROGRAM

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ABSTRACT

This qualitative-phenomenological study explored the experiences of science teachers in the implementation of the MATATAG Curriculum in an extra-large high school as basis for in-service training program. Using in-depth interviews, the study gathered data from eight (8) science teachers selected through purposive sampling. It was found that the experiences of science teachers in the implementation of the MATATAG Curriculum include increased classroom engagement, application of inquiry-based activities, science process skills development, learner-centered instructional delivery, and utilization of streamlined competencies. On the other hand, science teachers encountered challenges in the implementation of the MATATAG curriculum such as inadequate laboratory resources, time constraints and inconsistent interpretation of the curriculum, and large class size management. Moreover, science teachers cope with these challenges through proactive planning, pedagogical flexibility, resource optimization and material improvisation, technology integration, differentiated instruction, effective classroom management, peer collaboration,

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positive mindset, and professional development. Based on the results, the study proposes an in-service training program focusing on the implementation of the MATATAG curriculum.

Keywords: *Science Teachers, Experiences, Implementation, MATATAG Curriculum, Extra-Large High School, In-Service Training Program*

INTRODUCTION

In the rapidly evolving landscape of 21st-century education, curriculum reform has become a structural necessity to ensure that learners remain globally competitive. In the Philippines, the Department of Education (DepEd) responded to this imperative by launching the MATATAG Curriculum—a strategic recalibration of the K-12 program designed to decongest content, fortify foundational literacy and numeracy, and cultivate higher-order thinking skills.

This transition serves as a preemptive measure to address the chronic underperformance of Filipino learners in global benchmarks, most notably the Programme for International Student Assessment (PISA), where results have consistently signaled a need for urgent pedagogical intervention (DepEd, 2023; Lagbao, 2024).

However, as the implementation moves into its mid-cycle phases in 2024 and 2025, a significant "implementation gap" has emerged. While the curriculum is theoretically robust, current research identifies a pervasive "curriculum shock" among educators who grapple with

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INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VII, Issue III

February 2026

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unfamiliar competencies and a shortage of localized instructional materials (ResearchGate, 2024; Scribd, 2025). This friction is particularly acute in extra-large high schools. In these high-density environments, systemic pressures—characterized by class sizes often exceeding the 1:40 ratio recommended by DepEd—create a logistical barrier to the student-centered, inquiry-based approaches mandated by the new Science framework (Rappler, 2024; PIDS, 2025).

For Science educators, the transition is uniquely complex. The MATATAG Science curriculum demands a shift toward integrated, technology-driven, and hands-on methodologies (DepEd, 2024). Yet, current literature suggests that teachers in high-volume schools are frequently "overwhelmed" by the dual burden of heavy administrative duties and the technical rigors of new pedagogical strategies (UIJRT, 2025). By 2026, a consensus has formed within the academic community that standardized, "one-size-fits-all" national training modules are insufficient for addressing these localized struggles.

Consequently, there is an urgent need to evaluate and redesign professional development frameworks to better suit the specific realities of the classroom. To bridge the gap between policy intent and classroom reality, In-service Training (INSET) Programs must move beyond theoretical orientation and toward responsive, site-specific capacity building.

By addressing the unique logistical and pedagogical constraints inherent in high-volume school environments, the educational system can ensure that the MATATAG science

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curriculum does not remain a mere policy ideal, but becomes a functional catalyst for improved scientific literacy among Filipino learners.

MATERIALS AND METHODS

Research Methodology

This chapter outlines the methodology, research design, and participant selection, along with the protocols for data collection, the specific instruments utilized, and the techniques for data analysis. The primary goal of this research is to evaluate the professional experiences of science educators during the roll-out of the MATATAG Curriculum within a high-density secondary school, ultimately using these insights to develop a foundational in-service training program.

Research Method

The methodological framework for this investigation was rooted in qualitative inquiry, specifically employing in-depth interviewing as the primary means of data collection. This approach allowed for a profound exploration of individual perspectives, moving beyond numerical data to capture the nuanced professional experiences of the participants.

A descriptive research orientation was adopted, which prioritizes the systematic depiction of a phenomenon within its authentic, real-world context without the interference of controlled variables. As noted by Elliott (2025), this strategy is designed to offer a precise representation of existing conditions, instructional methods, or professional dynamics in school environments, thereby allowing investigators to identify significant trends, behavioral

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patterns, and practical consequences. This methodology proves especially effective for educational research aimed at documenting and evaluating genuine events and perceptions as they naturally unfold, ensuring the environment remains unaltered (Elliott, 2025).

During the sessions, the interviewer and the participant were positioned at a comfortable distance, fostering an atmosphere conducive to deep reflection on the specific inquiry at hand. The primary objective of this arrangement was to extract the most essential insights and core viewpoints regarding the implementation of the curriculum within its social and professional framework. By facilitating a thoughtful dialogue, the researcher was able to gather comprehensive responses that reflected the participants' authentic stance on the issues being discussed.

Research Design

The study utilized a phenomenological research design, a specialized philosophical framework within the qualitative tradition. This approach is dedicated to uncovering how individuals perceive and make sense of their environment, prioritizing their unique personal narratives and identifying where these lived realities might diverge from conventional or mainstream viewpoints. Often employed in fields such as psychology, sociology, and social work, this method relies heavily on structured dialogue with participants to extract deep, subjective insights.

At its core, phenomenology is the study of the architecture of consciousness, examined strictly from a first-person point of view. Its primary objective is to meticulously explore and

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depict phenomena exactly as they are perceived by the conscious mind. According to Biemel and Spiegelberg (2024), this requires the researcher to describe these experiences in their purest form, deliberately setting aside existing causal theories or unverified assumptions that might otherwise bias the findings.

Participants of the Study

The research participants consisted of eight (8) Grade 7 and Grade 8 science teachers from Oton National High School, chosen through purposive sampling. Eligibility for the study required that these educators be currently teaching science classes under the MATATAG framework and have successfully completed the official MATATAG training program.

Furthermore, the selection criteria stipulated that participants must hold a regular permanent appointment and possess a minimum of one year of teaching tenure at their current institution. Participation was strictly limited to those willing to provide a candid account of their professional experiences, including the specific obstacles they faced and the strategies they employed to overcome them. To ensure ethical standards were met, all teachers were fully informed of the study's nature and provided their formal consent before any data collection began.

Sampling Design

This study utilized a purposive sampling strategy to identify and recruit its participants. According to Nikolopoulou (2023), this method involves a range of non-probability techniques

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where specific subjects are included based on the precise attributes needed for the research.

In this framework, participants are not chosen at random but are instead selected with a deliberate "purpose" in mind.

Commonly known as judgmental sampling, this technique relies on the investigator's expertise to handpick the individuals, scenarios, or occurrences that offer the most valuable insights. By exercising this professional discretion, the researcher ensures that the gathered data is highly relevant and sufficiently robust to address the core goals of the investigation.

Research Instrument

The research instrument employed for this investigation was an original, researcher-developed interview schedule.

In the context of qualitative inquiry, an interview schedule serves as a structured or semi-structured roadmap, containing a specific set of queries or themes the investigator plans to address. According to Morris (2025), the fundamental goal of this guide is to ensure a systematic exploration of all pertinent topics across different sessions, thereby increasing the consistency, academic rigor, and comparability of the resulting data. Simultaneously, this framework provides the necessary latitude for the researcher to pursue in-depth follow-up questions and adapt to new insights as they surface during the conversation.

The specific schedule utilized in this study comprised three core questions, each meticulously designed to align with the overarching objectives of the research.

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To facilitate accurate data collection and documentation, both audio and video recording equipment were utilized, though their use was strictly contingent upon the explicit consent and approval of the participants.

Validity of the Research Instrument

Before determining the final validity of the researcher-developed interview schedule, the manuscript was submitted to the research adviser and the Dean of the Graduate School. Subsequently, a specialized panel of experts—selected for their proficiency in research methodology, assessment and testing, and English linguistics—was tasked with reviewing and refining each question to ensure optimal clarity and precision.

In a research context, validity denotes the degree to which a study's findings, interpretations, and ultimate conclusions accurately and meaningfully represent the phenomenon under investigation. This ensures that the instrument effectively measures its intended constructs and that the resulting data serves as a credible reflection of the real-world situation. To establish content validity, the structure and phrasing of the instrument must be meticulously aligned with the study's specific variables and goals, guaranteeing that every item corresponds to the theoretical framework. As noted by Creswell and Creswell (2023), this phase typically requires an expert evaluation to confirm that the items are relevant, transparent, and representative of the core concepts. By aligning the instrument's content with the overarching research framework, investigators improve the precision and practical utility of the data gathered.

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The researcher systematically integrated all feedback, revisions, and recommendations provided by the validation panel. This evaluative process was documented using the standardized criteria established by Good and Scates (1972), as cited by Soqueña (2021), ensuring that the tool met rigorous academic standards before implementation.

Data Gathering Procedures

To conduct the investigation, official authorization was secured from the research adviser, the Dean of the Graduate School, the Schools Division Superintendent, the District Supervisors, and the respective School Heads, in addition to obtaining informed consent from the participants. The researcher traveled personally to the schools or preferred community locations of the participants to ensure the interviews were conducted in a setting most convenient for them.

Before the formal sessions began, the researcher engaged with the participants to ensure they fully understood the nature of the study, securing their signatures on the necessary waivers and consent forms. This step was vital to ensure all ethical requirements and permissions were strictly upheld throughout the research process.

Utilizing an in-depth interviewing technique, the researcher employed both audio and video recording devices to ensure every detail of the participants' narratives was captured accurately. Once the series of interviews was finalized, the researcher meticulously organized and consolidated all gathered data for further evaluation.

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Data Analyses

The information gathered through the interview sessions was processed using thematic analysis, a qualitative methodology specifically intended for recognizing, interpreting, and documenting recurring motifs within narrative accounts. This systematic approach allows the investigator to reveal significant insights regarding the hurdles and adaptive techniques used by educators teaching reading in multi-grade settings within island schools.

Every transcribed response underwent a detailed examination to isolate nascent themes concerning the behavioral patterns, communication styles, decision-making processes, motivational factors, and support systems of these multi-grade instructors.

As stated by Braun and Clarke (2023), thematic analysis offers a versatile yet stringent structure for examining qualitative information, empowering researchers to detect both surface-level and underlying meanings within the participants' stories. It is especially appropriate for educational inquiries that aim to decipher intricate social and structural realities. Furthermore, Nowell et al. (2021) highlight that thematic analysis improves the clarity and reliability of qualitative research by mandating a methodical approach to data coding and interpretation.

The interview transcriptions were analyzed via the Thematic Analysis framework (Braun & Clarke, 2023), which is highly effective for the identification, evaluation, and reporting of patterns or themes within qualitative datasets.

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RESULTS AND DISCUSSIONS

This study explored the experiences of science teachers implementing the MATATAG Curriculum in an extra-large high school to inform an in-service training program.

Using a qualitative phenomenological design, eight (8) purposely selected Grade 7 and 8 science teachers from Oton National High School participated in in-depth interviews.

Data were collected through a researcher-made, content-validated interview schedule, with voice and video recordings used when permitted. Necessary permits were obtained from relevant authorities, and the researcher conducted all interviews personally. Collected data were then consolidated, analyzed, and interpreted using a thematic approach.

Based on the results of the in-depth interview with the participants, it was found that the experiences of Science teachers in implementing the MATATAG Curriculum include increased classroom, application of inquiry-based activities, science process skill development, learner-centered instructional delivery, and utilization of streamlined competencies.

It was found that science teachers' encountered challenges in an extra-large high school setting regarding the implementation of the MATATAG curriculum include inadequate laboratory resources, time constraints and inconsistent interpretation of the curriculum, and large class size management.

It was also found that the ways on how science teachers cope with the challenges encountered on the MATATAG curriculum implementation include proactive

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ISSN: 2704-3010

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planning, pedagogical flexibility, resource optimization and material improvisation, technology integration, differentiated instruction, effective classroom management, peer collaboration, positive mindset, and professional development.

The MATATAG Curriculum mandates instructional frameworks that prioritize active student participation, the cultivation of critical thinking, and a concentrated focus on essential competencies. Educators are increasingly recalibrating their pedagogical strategies to facilitate deeper conceptual understanding and practical application. This transition underscores the curriculum’s transformative impact on both classroom dynamics and student engagement, shifting the educational experience from rote memorization toward more meaningful, inquiry-based learning.

Despite the curriculum's theoretical strengths, teachers encounter substantial logistical and instructional impediments that may undermine the efficacy of curriculum delivery. These systemic challenges—often intensified in high-density school environments—compel educators to navigate a landscape of limited resources and time constraints. To mitigate these barriers, teachers must strategically prioritize key learning objectives and exercise creative problem-solving to ensure that the integrity of science instruction remains intact.

In response to these pervasive challenges, teachers actively employ a diverse array of adaptive strategies, demonstrating remarkable resourcefulness, collaboration, and professional resilience. By iteratively adjusting their instructional practices, leveraging localized tools, and pursuing continuous professional development, educators are able to sustain engaging science instruction. This proactive stance highlights the agency of teachers

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in overcoming environmental constraints to fulfill the objectives of the new curricular framework.

In summary, while the MATATAG Curriculum offers a robust framework for scientific inquiry, its success in extra-large schools depends on bridging the gap between policy and practice. The findings highlight that teacher resilience and adaptive strategies are vital, yet they must be supported by context-responsive professional development. By addressing the unique logistical constraints of high-density classrooms, the Department of Education can ensure that curriculum reform translates into genuine pedagogical improvement and sustained student excellence.

CONCLUSION

In the light of the findings and insights arrived in this study, the following recommendations are highlighted:

It is recommended that administrative leaders provide a foundational evidence base for policy adjustments that specifically address the "extra-large" school classification. Officials should prioritize the allocation of additional teacher items and laboratory funding to high-density schools to reduce the instructional burden and allow for the learner-centered approach of the MATATAG curriculum to flourish.

Planners should utilize the results of this study to refine the "decongested" Science competencies, ensuring that the time allotted for inquiry-based activities is realistic for large-class settings. It is further recommended that they develop standardized "Large-Class

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ISSN: 2704-3010

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Exemplars" that provide specific strategies for group work and hands-on exploration in cramped or resource-limited environments.

School heads should move beyond traditional administrative monitoring toward becoming strategic instructional leaders. They should establish structured support systems, such as Professional Learning Communities (PLCs) and "Science-Math-English" collaborative hubs, to strengthen teachers' capacity. By understanding the lived experiences of their staff, they can better facilitate the transition to the new curriculum through flexible scheduling and localized resource allocation.

Educators are encouraged to continue embracing pedagogical flexibility and the contextualization of lessons. By utilizing indigenous materials and digital tools, teachers can bridge the gap between theoretical science and practical application. Continuous participation in peer-mentorship and collaborative planning is recommended to mitigate "curriculum shock" and share best practices for managing high-volume cohorts.

Students should be encouraged to take an active role in their own learning by participating in inquiry-based activities and scientific discovery. They should leverage the streamlined nature of the curriculum to focus on mastering fundamental scientific skills, viewing the shift from rote memorization to critical thinking as an opportunity to become globally competitive.

As vital partners in the "Home-School Partnership," parents should provide a supportive environment for hands-on exploration at home. They are encouraged to engage

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ISSN: 2704-3010

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with their children's scientific inquiries and maintain open communication with teachers to better understand how they can reinforce the MATATAG competencies outside the classroom.

The school should implement context-responsive training programs promptly, ensuring the full participation of Grade 7 and 8 Science teachers. These programs should move away from generic lectures and instead focus on "problem-centered" workshops. Continuous support through follow-up sessions, mentoring, and digital resource access is essential to sustain improvements in curriculum delivery.

It is recommended that future researchers conduct longitudinal studies or comparative analyses across different school contexts (e.g., small rural schools vs. extra-large urban schools). Investigating the long-term impact of the MATATAG curriculum on student performance in standardized tests like PISA will provide broader insights into the sustainability of current educational reforms.

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