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COUNTING CHALLENGES AND TRIUMPHS: GRADE 4 MATHEMATICS TEACHERS' EXPERIENCES WITH THE ENHANCED CURRICULUM

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Abstract

The Department of Education (DepEd) introduced the Enhanced (MATATAG) Curriculum to decongest learning content, strengthen foundational skills, and promote critical thinking and real-world application. In Grade 4 Mathematics, the reform demands a pedagogical shift from rote memorization and procedural fluency toward conceptual understanding and problem-solving, but little is documented about how teachers experience this shift in classrooms. This qualitative phenomenological study investigated the lived experiences of Grade 4 Mathematics teachers in the Division of Valencia City, Bukidnon, Philippines, during the initial implementation of the curriculum. It examined the challenges encountered, the strategies employed, the forms of support received, and the influence of these experiences on instructional practice and professional growth. Data were gathered through in-depth semi-structured interviews, focus group discussions, and open-ended questionnaires with 25 purposively selected Grade 4 Mathematics teachers. The transcribed narratives were analyzed thematically following Braun and Clarke's (2006) framework, with MAXQDA used for coding. Teachers faced a difficult pedagogical shift toward learner-centered, inquiry-based instruction; a critical shortage of aligned instructional materials and technology; difficulty managing diverse learners; and the demanding nature of performance-based assessment. They responded resourcefully, creating do-it-yourself manipulatives from local materials, using collaborative learning structures, and contextualizing lessons through real-world problems. Learning Action Cells (LACs) and colleagues were the most valued sources of support, yet these could not offset systemic resource gaps and heavy workloads. Despite the obstacles, implementation catalyzed professional growth, shifting teachers' identities from knowledge transmitters to learning facilitators and strengthening adaptability, creativity, and reflective practice. The findings are synthesized in an Experiential Learning and Reflective Practice (EL-RP) Model. The promise of the MATATAG Curriculum for deepening learning and empowering teachers depends on addressing the identified systemic barriers. DepEd and school administrators are encouraged to provide adequate and timely resources, institutionalize continuous practice-based professional development, strengthen collaborative support systems, and establish formal feedback mechanisms so that curriculum policy is grounded in classroom reality.

Keywords: *MATATAG Curriculum; Grade 4 Mathematics; teacher experiences; curriculum implementation; challenges and triumphs; phenomenology; Philippines*

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INTRODUCTION

Background and Rationale

The Department of Education (DepEd) in the Philippines has implemented the MATATAG Curriculum as a strategic reform of the K to 12 Basic Education Program. The acronym captures its core pillars: making the curriculum relevant to produce job-ready, active, and responsible citizens; taking steps to accelerate the delivery of basic education facilities and services; taking care of learners by promoting well-being, inclusive education, and positive learning environments; and giving support to teachers to enhance instructional quality (Department of Education [DepEd], 2024). The revised curriculum aims to decongest learning content, strengthen foundational skills, and place greater emphasis on critical thinking, real-world application, and values formation across all learning areas.

Within Grade 4 Mathematics, the curriculum necessitates a significant pedagogical shift. The focus moves from rote memorization and procedural fluency toward deeper conceptual understanding and the development of problem-solving and analytical thinking. This requires teachers to adopt more learner-centered, contextualized, and interactive approaches that connect mathematical concepts to practical, real-life situations.

The transition, however, presents several documented challenges. Bejasa (2025) observed that implementation in public schools has often been abrupt, leaving teachers feeling underprepared because of insufficient professional development, which in turn creates uncertainty in instructional planning and in lesson delivery aligned with the new competencies. A further barrier is the scarcity of aligned instructional resources. Fabroa (2024) reported a notable shortage of updated textbooks, teaching guides, and learner materials, particularly in rural and lower-income areas, which compels teachers to invest considerable personal time in developing or adapting materials. In addition, the emphasis on performance-based assessment and active learning increases the demand on teachers' time for lesson preparation, progress monitoring, and the creation of authentic assessment tools capable of measuring complex skills such as mathematical reasoning (Loza, 2024).

Technology adds another layer of complexity. Although the curriculum encourages digital tools, Andrin et al. (2024) identified insufficient access to technology, unreliable internet connectivity, and limited training in information and communication technology (ICT) as obstacles. This digital divide restricts mathematics teachers' use of visualizations, simulations, and other interactive methods that could aid conceptual understanding. Paradoxically, while the curriculum aims to reduce content overload for learners, it may inadvertently increase the cognitive and workload demands on teachers: Loza (2024) pointed out that the expectation to implement more intensive, individualized teaching, especially in multigrade or large-class settings, can contribute to teacher fatigue and diminished motivation.

Despite these challenges, educators have shown resourcefulness and adaptability. Fabroa (2024) highlighted innovative practices such as using locally available or recycled materials as mathematical manipulatives, taking part in peer-sharing sessions for collaborative lesson development, and contextualizing problems with local culture to improve engagement. In the Division of Valencia City, the site of this study, Grade 4 Mathematics teachers are navigating this complex landscape. Preliminary data from School-Based Learning Action Cell (LAC) sessions indicate a spectrum of experiences, with some teachers benefiting from supportive professional learning communities while others report a need for more robust institutional support.

Because teacher efficacy is a critical determinant of successful curriculum reform, this study systematically investigates the lived experiences of Grade 4 Mathematics teachers in the Valencia City Division as they implement the MATATAG Curriculum. Documenting their perspectives is essential for understanding the on-the-ground realities of national policy enactment. By capturing both the challenges and the adaptive strategies of these educators, the research seeks to contribute insights to the ongoing refinement of the curriculum and to the design

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of targeted teacher-support programs, ultimately supporting DepEd's goal of an equitable and effective learner-centered education system.

Review of Related Literature and Studies

The literature is organized around the six research questions of the study.

Common challenges faced by Grade 4 Mathematics teachers

The Enhanced MATATAG Curriculum is a pivotal reform that aims to simplify learning competencies while enhancing foundational literacy and numeracy (DepEd, 2023), yet Grade 4 Mathematics teachers face numerous challenges in adapting to it. One of the most pervasive is curriculum overload: although the curriculum was designed to decongest the K to 12 program, teachers still report difficulty covering essential competencies within limited instructional time, a problem compounded by pressure to meet performance standards and prepare learners for national assessments (Bautista et al., 2024). A related challenge is preparedness for learner-centered, competency-based pedagogy. Many teachers continue to rely on rote learning and procedural instruction rather than conceptual understanding (Orleans, 2021), a difficulty traced to limited pre-service and in-service exposure to constructivist and inquiry-based methods (Valdez, 2022), which leaves them struggling to integrate problem-solving and critical thinking into lessons.

Resource constraints are a further barrier. Many public elementary schools lack the teaching materials, manipulatives, and ICT tools that an interactive, contextualized approach requires (Salandanan & Corpuz, 2020). In Mathematics, concrete visual aids such as counters, charts, and digital applications are crucial to concept formation, yet they are often unavailable, particularly in remote and underfunded schools, widening the gap in educational quality (Crisostomo, 2023). Urban and rural contexts differ markedly: urban schools tend to have more resources and exposure to technology-based instruction, whereas rural teachers rely on traditional methods and, in geographically isolated areas, struggle to access online modules, training materials, and professional communities (Pascual, 2022).

Workload is another persistent concern. Additional administrative tasks, documentation requirements, and performance-monitoring systems leave teachers less time to prepare engaging lessons (Nolasco, 2021); multitasking contributes to stress and burnout, and class sizes that exceed the ideal teacher-to-student ratio make individualized instruction and formative assessment difficult (Bernardo, 2020). New performance standards and learning codes, together with streamlined competencies and spiral progression, have also caused confusion, and studies note inconsistent teacher interpretations of the curriculum guide that lead to varied practices across schools (Del Rosario, 2022). Professional development opportunities are insufficient: DepEd and division orientations are often short-term and theoretical, lacking practical demonstrations or classroom modeling (Tarrayo et al., 2023), so teachers resort to self-directed learning and peer sharing that may not always yield accurate application.

Affective and cultural factors matter as well. Filipino students' pervasive fear of Mathematics, coupled with parental pressure for high grades, creates a tense learning environment (Calleja, 2020); teachers must manage these affective barriers, often without training in socio-emotional learning or motivational strategies. Assessment also poses difficulties. The shift toward formative, authentic, and performance-based assessment requires teachers to develop rubrics, tasks, and feedback mechanisms that go beyond traditional testing (DepEd, 2023), and many are uncertain about designing valid and reliable assessments that capture conceptual understanding through application rather than memorization (Santos, 2022). Finally, insufficient funding, unclear communication from higher authorities, and the rapid rollout of reforms compound these problems. As Fullan (2016) emphasized, successful reform requires coherence, support, and sustained teacher engagement; without them, even a well-designed curriculum risks uneven implementation at the classroom level, where change actually occurs.

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Strategies and innovations employed by teachers

Teachers have adopted varied strategies to improve instructional delivery and learning outcomes. Central among them is differentiated instruction, which tailors lessons to students' readiness, interests, and learning profiles and so supports inclusivity and equity (Tomlinson, 2017). In the Philippine setting, it has become a cornerstone of adaptive pedagogy, allowing teachers to address struggling and advanced learners under the same framework (Orleans, 2021). Technology integration is another critical innovation: with the spread of digital tools and mobile devices, teachers use applications such as GeoGebra, Desmos, and online simulations to visualize abstract concepts (Ilić & Kaur, 2021), and in Philippine classrooms they often use locally adapted open educational resources (OERs) to align digital tools with curriculum goals and bridge the resource gap (Santiago, 2022).

Contextualized and localized materials, mandated through DepEd's contextualization policy, integrate local examples, community experiences, and indigenous knowledge into lessons (DepEd, 2023). Teachers report that contextualization makes mathematics more relatable, especially in rural settings where applications such as budgeting, measuring, and trading connect directly to daily life (Llaneta, 2021). Peer collaboration and learning communities are equally vital: teachers rely on professional learning communities (PLCs) to share lesson plans, discuss implementation problems, and co-develop assessment tools (Vescio et al., 2008), and in the Philippine public school system Learning Action Cells (LACs) have been institutionalized as spaces for reflective practice and collective problem-solving (Tarrayo et al., 2023).

Reflective practice enables teachers to evaluate their strategies and adjust them to curricular objectives (Schön, 1983), and develops metacognitive awareness of pedagogical decisions, particularly for complex topics; reflective journals, lesson study groups, and post-lesson conferences are common tools (Murillo & Hidalgo, 2020). Some educators turn to action research, testing interventions for specific instructional problems and building a culture of evidence-based decision-making (Stringer, 2014), an approach DepEd increasingly supports within its continuing professional development initiatives (Bautista et al., 2024). Time-management and prioritization strategies are also cited as effective coping mechanisms: teachers streamline lesson plans, emphasize key competencies, and focus on mastery rather than superficial coverage (Guskey, 2002), often using modular pacing guides and weekly learning targets to maintain coherence without overwhelming students (Del Rosario, 2022).

Community and parental involvement strengthen implementation; teachers who engage parents in numeracy support through homework guidance, home-based activities, and school events report improved student motivation and performance (Epstein, 2018), consistent with the curriculum's principle of shared responsibility (DepEd, 2023). Socio-emotional learning (SEL) strategies such as growth mindset, perseverance, and self-efficacy help students overcome anxiety and negative attitudes toward Mathematics (Dweck, 2016). Lastly, teachers show creativity through low-cost, improvised materials, such as bottle caps for counters or cardboard for fraction models (Crisostomo, 2023), grassroots innovations that exemplify their resourcefulness despite systemic limitations.

Forms of support received by teachers and their effects on implementation

The success of curriculum implementation depends largely on the type and quality of teacher support. Sustained professional development, mentoring, and systemic support are key factors enabling teachers to internalize and apply reform principles; without institutional backing, teachers tend to revert to traditional methods, undermining the transformative intent of the innovation (Darling-Hammond et al., 2017). Professional development (PD) is the most direct and formal mechanism. Effective programs deepen subject knowledge, refine pedagogical skills, and promote reflective inquiry (Desimone & Garet, 2015). DepEd offers various trainings for the MATATAG Curriculum, but while these raise awareness of curricular changes, their effectiveness depends on relevance, continuity, and local adaptability, and short-term workshops have limited impact compared with sustained, practice-based learning (Tarrayo et al., 2023).

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Mentorship and coaching are vital complements. Experienced or master teachers act as instructional coaches through modeling, observation, and feedback (Knight, 2018), helping teachers translate theory into practice. In Philippine public schools, the LAC framework has institutionalized collaborative mentoring in which teachers discuss challenges, share strategies, and co-develop lesson plans (DepEd, 2023), fostering professional dialogue and collective efficacy (Goddard et al., 2015). Administrative support sustains motivation and capacity for change: school leaders who provide clear direction, recognition, and instructional resources increase teachers' willingness to innovate (Hallinger & Heck, 2011), whereas rigid bureaucratic structures and excessive paperwork stifle creativity (Nolasco, 2021). Principals who observe classes, facilitate resource allocation, and encourage experimentation create an enabling environment (Day & Gu, 2010). Peer collaboration is an informal yet powerful form of support; teachers who engage in peer observation, collaborative planning, and professional dialogue are more likely to adopt student-centered, research-based practices (Vescio et al., 2008), and in Philippine mathematics education, peer learning networks promote the exchange of concrete lesson exemplars (Orleans, 2021).

Access to up-to-date textbooks, manipulatives, and technological tools is another crucial dimension (Salandanan & Corpuz, 2020), yet resource distribution remains inequitable, especially in rural areas (Crisostomo, 2023); where institutional support falls short, teachers create or adapt their own materials, although DepEd's centralized digital repositories and localized teaching kits help ease this burden (DepEd, 2023). Psychosocial support is increasingly recognized as essential because teaching under reform conditions is emotionally taxing (Hargreaves & Fullan, 2012); emotional support from administrators, colleagues, and families mitigates stress, and schools that promote teacher well-being tend to have higher retention and stronger professional communities (Organisation for Economic Co-operation and Development [OECD], 2020). Community partnerships reinforce learning beyond the classroom (Epstein, 2018), and policy support from DepEd and local government units (LGUs) aligns initiatives with national priorities; the rollout emphasizes "shared accountability" among teachers, administrators, and policymakers (DepEd, 2023), and policy gaps or delays produce confusion and inconsistent implementation (Del Rosario, 2022). Finally, the effectiveness of support lies not in its quantity but in its coherence and integration (Fullan, 2016): teachers benefit most when professional development, administrative support, and peer collaboration operate synergistically, which fosters the professional agency needed to sustain change.

Influence of teachers' experiences on instructional practices and professional development

Teachers' experiences are a cornerstone of instructional practice and continuous professional development. Implementing an enhanced curriculum challenges technical competence and transforms pedagogical perspectives and self-efficacy; as Fullan (2016) posits, meaningful reform begins and ends with teachers, whose interpretations, beliefs, and responses determine how reforms materialize. Exposure to curriculum innovation encourages more learner-centered practices (Harris & Jones, 2020); teachers who struggle to facilitate conceptual learning in Mathematics tend to adopt problem-based and inquiry-driven strategies (Orleans, 2021), adaptive practices that arise from reflective engagement with challenges, a key indicator of professional growth (Schön, 1983). Experience also builds instructional flexibility. According to Guskey (2002), changes in teaching behavior often precede changes in beliefs, so when teachers succeed with new strategies, their confidence and commitment grow; experimentation with differentiated instruction and formative assessment lets teachers respond to diverse learner needs (DepEd, 2023) and creates feedback loops that refine both pedagogy and professional identity.

Professional development is deeply intertwined with experiential learning. Teachers' learning is most powerful when grounded in authentic classroom experience rather than abstract theory (Day & Sachs, 2004), and structured reflection through LACs enables teachers to convert shared experiences into collective solutions (Tarrayo et al., 2023). Experience shapes self-efficacy and agency: mastery experiences strengthen teachers' belief in their capability to affect student learning (Bandura, 1997), whereas persistent challenges without adequate support can lead to burnout and diminished motivation (Skaalvik & Skaalvik, 2018). Collaboration amplifies development

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through social learning in professional learning communities (Vescio et al., 2008) and, in Mathematics, through collaborative reflection, co-created lesson exemplars, and better alignment with curricular goals (Orleans, 2021). Schön (1983) distinguished reflection-in-action from reflection-on-action, both of which improve instructional decision-making, and systematic reflection is associated with greater instructional coherence and responsiveness to learners (Farrell, 2015).

Experiences with reform also shape attitudes toward change: willingness to innovate depends on whether earlier reform experiences were empowering or disempowering (Hargreaves & Fullan, 2012), so teachers who perceive MATATAG implementation as supportive and well guided show higher motivation to adopt student-centered pedagogies, while inconsistent training or lack of feedback can foster resistance. Teachers' conceptions of assessment evolve as well, toward formative and summative assessment as tools for learning rather than mere evaluation (Black & Wiliam, 2009), supporting a shift from rote assessment to performance-based evaluation of deeper understanding. Cumulatively, the interplay of classroom challenges, administrative expectations, and learner outcomes fosters resilience, adaptability, and reflective professionalism; teachers who learn from experience become agents of change who mentor peers, influence policy discourse, and contribute to curriculum development (Darling-Hammond et al., 2017).

Insights from teachers' experiences for curriculum improvement and support systems

Teachers' lived experiences are an invaluable resource for responsive, context-sensitive reform. Their direct engagement with classroom realities makes them key informants in evaluating and refining innovations, and reforms that ignore this experiential insight are often short-lived (Fullan, 2016). Teachers identify mismatches between prescribed competencies and learners' developmental readiness (Darling-Hammond et al., 2017); in Mathematics, such insights reveal cognitive gaps, clarify instructional sequences, and align tasks with conceptual understanding (Orleans, 2021), giving curriculum developers a diagnostic lens on content scope, pacing, and assessment standards. Teachers' experiences also illuminate contextual barriers such as inadequate resources, heavy workloads, and differing learner profiles, enabling policymakers to design support responsive to local needs rather than one-size-fits-all (Tarrayo et al., 2023); in resource-limited schools, for instance, teachers advocate modularized or differentiated instruction (Crisostomo, 2023).

Reflective experience also reveals which innovations promote learning. Technology integration, contextualized problem-solving, and manipulatives in Mathematics are associated with higher engagement and retention (Salandanan & Corpuz, 2020), and this bottom-up feedback can identify practices worth institutionalizing, scaling up, or building into teacher training. Meaningful professional growth occurs when teachers see a direct link between their experiences, their learning, and improved student outcomes (Guskey, 2002), so reflections on challenges and successes can transform PD from a compliance activity into an evidence-based, teacher-driven process. Professional learning communities enable teachers to articulate shared experiences, analyze common challenges, and co-create innovations (Vescio et al., 2008), and institutionalized feedback loops between PLCs and curriculum developers could strengthen alignment between goals and classroom realities. Emotional experiences such as stress, empowerment, or satisfaction likewise influence engagement with reform (Hargreaves & Fullan, 2012) and can guide psychosocial support, and firsthand encounters with assessment challenges can inform more holistic and flexible frameworks that measure problem-solving, reasoning, and metacognition alongside content mastery (Black & Wiliam, 2009).

At the policy level, the systematic collection and analysis of teacher experience is a form of participatory curriculum evaluation that promotes accountability, transparency, and shared ownership (Fullan, 2016); narratives, case studies, and focus group insights give policymakers rich interpretive evidence that complements quantitative indicators. The collective insights point to the need for institutionalized feedback systems within DepEd and local schools through which teachers continuously communicate observations, innovations, and

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challenges to decision-makers (DepEd, 2023), making curriculum improvement a dynamic, cyclical process driven by practitioners as well as policymakers.

Proposed intervention programs

Teachers' experiences offer a foundation for designing interventions that address instructional and systemic challenges, because sustainable reform depends on building teacher capacity through coherent systems of professional learning and continuous support (Fullan, 2016). A critical intervention is continuous professional learning: rather than one-time seminars, programs should be modular and competency-based, aligned with teachers' evolving needs (Darling-Hammond et al., 2017), and characterized by mentoring, collaboration, and feedback, which are linked to improved instruction and achievement (Desimone & Garet, 2015). For Mathematics teachers, such programs could emphasize content mastery, pedagogical content knowledge, and adaptive strategies for differentiation. Professional learning communities provide a safe space to share innovations, analyze classroom data, and co-develop lesson exemplars (Vescio et al., 2008), and can be institutionalized through regular LAC sessions, which DepEd (2023) already recognizes as a platform for peer mentoring. Instructional coaching, with personalized feedback, observation, and co-planning, strengthens practice and builds confidence and resilience (Knight, 2018).

To address resource inequities, a resource-enhancement and digital-support initiative can provide digital repositories, localized teaching kits, and OERs (Crisostomo, 2023), complemented by digital-literacy training that supports technology integration and remote or blended modalities. A parallel intervention targets emotional and psychosocial support, because the demands of curricular change can lead to stress, burnout, and reduced motivation (Skaalvik & Skaalvik, 2018); wellness programs, counseling services, peer-support networks, and recognition systems that celebrate innovation and resilience help sustain teachers' well-being. Curriculum feedback and review mechanisms (surveys, focus groups, and participatory policy dialogues) should be institutionalized so that teachers' experiences become active inputs to curriculum evaluation and teachers are validated as co-creators of policy (Fullan, 2016).

Leadership development for school heads is essential because effective instructional leadership directly influences teaching and learning (Hallinger & Heck, 2011); training should emphasize transformational and distributed models in which responsibility is shared. Interventions must also extend to parents and communities through mathematics awareness campaigns, learning workshops, and community-based tutoring (Epstein, 2018). At the policy level, partnerships among universities, research institutions, and DepEd divisions can develop and test localized instructional models, digital tools, and assessment frameworks, since change thrives when policies and practices rest on continuous inquiry, reflection, and evaluation (Guskey, 2002). Ultimately, interventions should embody a culture of adaptive learning in which feedback, reflection, and innovation are ongoing, so that teachers grow professionally, students learn meaningfully, and institutions evolve responsively toward the curriculum's promise of competent, confident, and compassionate learners.

Theoretical and Conceptual Framework

The implementation of the MATATAG Curriculum represents a significant shift in instructional focus, content organization, and pedagogical approach. It seeks to strengthen foundational skills, particularly in Mathematics, while promoting problem-solving, critical thinking, and lifelong learning, but such reforms inevitably bring opportunities and challenges for teachers, especially at the elementary level, who nurture students' early understanding of mathematical concepts. This study explores the lived experiences of teachers implementing the curriculum and documents their challenges, strategies, supports, and insights, with the goal of proposing interventions that strengthen curriculum delivery and teacher development. The framework draws on three major theories: Constructivist Learning Theory (Piaget, 1972; Vygotsky, 1978; Bruner, 1966), Curriculum

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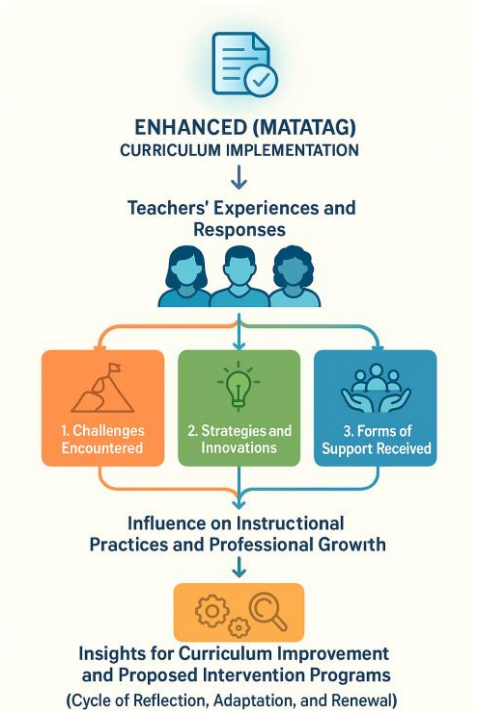
Implementation Theory (Fullan, 2007; Ornstein & Hunkins, 2018), and Experiential Learning Theory (Kolb, 1984). Together, they explain how teachers experience, interpret, and respond to curriculum innovations.

Constructivist Learning Theory. Constructivism posits that learning occurs through active engagement in which individuals construct new knowledge from prior experience (Piaget, 1972; Bruner, 1966). In mathematics, it emphasizes learner-centered instruction, discovery-based activities, and contextual problem-solving, so implementing the MATATAG Curriculum entails rethinking instruction to move from rote memorization to conceptual understanding. Challenges arise when resources, class size, or learner readiness hinder constructivist practice, while triumphs such as innovative strategies and meaningful learning reflect successful adaptation. Constructivism therefore anchors the pedagogical dimension of teachers' experiences.

Curriculum Implementation Theory. Fullan (2007) conceptualizes implementation not as a mechanical process but as a complex, multidimensional one shaped by teacher beliefs, institutional context, and system-level support. Teachers are thus active agents who interpret, mediate, and transform curricular intentions into classroom practice. This perspective informs the study's examination of the challenges teachers face in interpreting and applying the new standards, the strategies they develop, and the support they receive from peers, school administrators, and systemic training programs. As Ornstein and Hunkins (2018) affirm, success depends not only on the quality of curriculum design but also on teacher capacity, collaborative structures, and effective institutional leadership.

Experiential Learning Theory. Kolb's (1984) theory explains how teachers develop professional competence through a continuous cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Teachers implementing the MATATAG Curriculum engage in this cycle as they confront challenges, reflect on classroom outcomes, derive insights, and modify their practice. The study's research questions align with this cycle: teachers' reflections on their experiences (RQ4) and their insights for curriculum improvement (RQ5) correspond to the reflective and conceptualization stages, while the proposed intervention programs (RQ6) correspond to active experimentation, translating understanding into future action.

Figure 1. **Research Paradigm of the Study**



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Figure 1 shows the research paradigm, which illustrates the cyclical relationship among the major components of the investigation. At the top is the Enhanced (MATATAG) Curriculum Implementation, the starting point and core focus, which triggers the process through which teachers' experiences and responses are gathered and analyzed. From these experiences emerge three primary dimensions, Challenges Encountered, Strategies and Innovations Employed, and Forms of Support Received, which together give a holistic view of how teachers adapt to and manage implementation and reflect both the difficulties and the creative responses that shape instructional practice. As experiences accumulate, they influence Instructional Practices and Professional Growth, and the insights drawn from them lead to Curriculum Improvement and the formulation of Proposed Intervention Programs. The paradigm completes a Cycle of Reflection, Adaptation, and Renewal, symbolizing the ongoing evaluation and enhancement that keep the MATATAG Curriculum responsive, effective, and grounded in the lived realities of educators.

Statement of the Problem and Research Questions

This study explored the lived experiences of Grade 4 Mathematics teachers in the Division of Valencia City during the initial phase of implementing the MATATAG Curriculum. It aimed to identify both the challenges they encounter and the triumphs they achieve, as well as the support systems that influence their instructional delivery and professional growth. Specifically, it sought to answer the following questions:

RQ1. What are the common challenges faced by Grade 4 Mathematics teachers in implementing the MATATAG Curriculum?

RQ2. What strategies or innovations have teachers employed to overcome these challenges?

RQ3. What forms of support (e.g., professional development, peer collaboration, administrative assistance) do teachers receive, and how do these affect implementation?

RQ4. How do these experiences influence the teachers' instructional practices and professional development?

RQ5. What insights can be drawn from teachers' experiences to inform curriculum improvement and support systems?

RQ6. What intervention programs can be proposed based on the results of the study?

Guiding Assumptions

Although the study is qualitative and does not employ statistical hypothesis testing, it operates under theoretical and conceptual assumptions that guide its exploration of teachers' experiences:

- The experiences of Grade 4 Mathematics teachers in implementing the MATATAG Curriculum are shaped by their specific school environments, access to resources, administrative support, and the diversity of their learners.
- The curriculum's introduction influences teachers' professional identities and pedagogical practices, prompting reflection, innovation, and a renewed sense of professional purpose.
- The obstacles encountered during implementation lead teachers to develop adaptive strategies, innovative teaching techniques, and stronger problem-solving capacities.

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- Institutional support, professional development programs, and collaborative peer networks contribute positively to teachers' ability to implement the curriculum effectively and to sustain professional growth.

Significance of the Study

The study holds relevance for understanding the real-world implications of curriculum reform from the perspective of those who implement it. The Enhanced MATATAG Curriculum aims to streamline learning competencies, promote mastery of fundamental skills, and strengthen teacher-led instruction in key learning areas such as Mathematics, but its success depends heavily on teachers' capacity to interpret, adapt, and apply the content within their classroom contexts. Through a phenomenological lens, the study illuminates the interplay between policy design and classroom practice. Its findings are expected to benefit the following groups.

Grade 4 Mathematics teachers are at the forefront of implementation. By articulating their challenges and triumphs, the study offers an avenue for professional reflection and shared learning, documents adaptive strategies that can serve as a basis for improving instruction, and underscores professional agency, that is, teachers' capacity to make pedagogical decisions responsive to learners' needs and contexts. Teachers may also benefit from more relevant professional development programs aligned with actual classroom conditions.

Students will benefit indirectly. When teachers are better supported, professionally equipped, and confident, learners receive better instruction and deeper engagement. The study shows how pedagogical challenges, such as conceptual understanding, assessment alignment, and resource limitations, affect teaching efficacy and, consequently, learning, and evidence-based interventions can contribute to higher achievement, motivation, and engagement.

School administrators and educational leaders gain insight for designing more responsive support systems, such as mentoring programs, resource provision, and time for collaborative planning. The study highlights the importance of leadership in fostering a supportive professional environment, which can enhance teacher morale, reduce burnout, and promote instructional excellence.

Curriculum developers, policymakers, and teacher education institutions can use the thematic insights to refine the curriculum so that prescribed standards are realistic, context-sensitive, and adaptable to varying school conditions. Teacher education institutions can integrate the findings into pre-service and in-service programs, bridging theory and practice so that teacher competencies align with current reforms.

Parents and the community will gain awareness of how new curriculum structures shape children's learning and how they can reinforce learning at home, recognizing that curriculum implementation is a shared societal responsibility.

The academic field of educational research gains qualitative depth on curriculum implementation, teacher agency, and mathematics education. The findings may serve as foundational data for future mixed-methods or quantitative studies that validate and extend these themes. Ultimately, the study underscores the role of teachers as agents of change, whose professional growth and pedagogical resilience are key determinants of the success of the Enhanced MATATAG Curriculum.

Operational Definitions of Terms

The terms below are defined operationally to ensure a clear understanding of the study's variables.

Administrative support refers to the assistance provided by school heads, principals, or curriculum coordinators to Grade 4 Mathematics teachers in implementing the Enhanced MATATAG Curriculum, which may include

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guidance, resources, monitoring, mentoring, and policy direction that facilitate effective instructional delivery (DepEd, 2023).

Challenges refer to the difficulties, barriers, or constraints encountered by teachers in carrying out the new curriculum requirements, including issues related to instructional materials, learner diversity, workload, training, or alignment of learning competencies (Fullan, 2016).

Curriculum implementation pertains to the process by which teachers translate curriculum standards, learning competencies, and pedagogical approaches into classroom practice, including lesson planning, instructional delivery, assessment, and classroom management in accordance with the MATATAG framework (Ornstein & Hunkins, 2018).

Enhanced MATATAG Curriculum is the restructured and improved version of the Philippine K to 12 Curriculum, emphasizing foundational skills, balanced learning content, and reduced congestion in learning competencies, and aiming to make learning more relevant, inclusive, and responsive to the needs of 21st-century learners (DepEd, 2023).

Experiences refer to the lived realities, perceptions, and reflections of Grade 4 Mathematics teachers as they engage with the Enhanced Curriculum, encompassing both the challenges and the triumphs that shape their teaching practices and professional development (Creswell & Poth, 2018).

Instructional practices denote the specific teaching methods, classroom strategies, and assessment techniques teachers use to facilitate mathematical understanding, including the integration of problem-solving, technology use, and differentiated instruction aligned with the curriculum's learning outcomes (Shulman, 1987).

Intervention programs are structured actions, projects, or initiatives proposed to address the challenges identified in the study, such as professional learning sessions, peer mentoring, instructional coaching, or curriculum enhancement plans designed to support teacher effectiveness and student learning (Guskey, 2002).

Professional development refers to ongoing learning opportunities and capacity-building activities that enhance teachers' knowledge, skills, and attitudes toward teaching Mathematics effectively, including seminars, workshops, mentoring programs, and participation in professional learning communities (Darling-Hammond et al., 2017).

Strategies refer to the pedagogical or management approaches teachers employ to overcome challenges and improve instructional effectiveness, including innovation in lesson design, collaboration with peers, and adaptation of teaching methods to learner needs (Marzano et al., 2001).

Support systems encompass the network of institutional, professional, and emotional supports available to teachers as they implement the Enhanced MATATAG Curriculum, including school leadership, peer collaboration, family engagement, and access to teaching resources (Avalos, 2011).

Triumphs refer to the positive experiences, successes, and milestones teachers achieve in implementing the curriculum, which may involve improved student performance, enhanced instructional skills, or increased professional confidence (Hargreaves & Fullan, 2012).

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METHODS

Research Design

The study used a qualitative descriptive research design anchored on a phenomenological approach. The design suited the aim of understanding, describing, and interpreting the lived experiences of Grade 4 Mathematics teachers as they implement the MATATAG Curriculum, and it emphasizes the "what," "how," and "why" of teachers' experiences: what challenges they encounter, how they overcome them, and why certain strategies or supports are effective.

According to Creswell and Poth (2018), phenomenological research aims to uncover the essence of participants' experiences of a particular phenomenon; here, the phenomenon is the implementation of the MATATAG Curriculum. Semi-structured interviews and focus group discussions allowed the researcher to gather deep, authentic narratives reflecting the realities of curriculum reform in the classroom. The descriptive character of the design permitted a clear and comprehensive account of teachers' experiences without manipulating variables; as Sandelowski (2000) emphasized, qualitative description keeps researchers close to the data and to participants' own words, producing findings that are credible and contextually grounded rather than shaped by preconceived theoretical interpretation. The design also aligned with the study's objectives of identifying challenges, strategies, and forms of support and proposing interventions, since a qualitative approach offers the flexibility to explore complex human experiences and the contextual factors that influence curriculum implementation (Merriam & Tisdell, 2016).

Research Locale

The study was conducted in Valencia City, a first-class component city in the Province of Bukidnon, Northern Mindanao, Philippines. The city lies between latitudes 7°50′ and 8°00′ north and longitudes 125°00′ and 125°10′ east, and serves as the geographic and economic heart of the province. Its location along the Sayre Highway provides access to neighboring municipalities such as Maramag to the south and Malaybalay City, the provincial capital, to the north. Its terrain of gently rolling plains, river basins, and mountainous uplands suits agriculture, settlement, and institutional development.

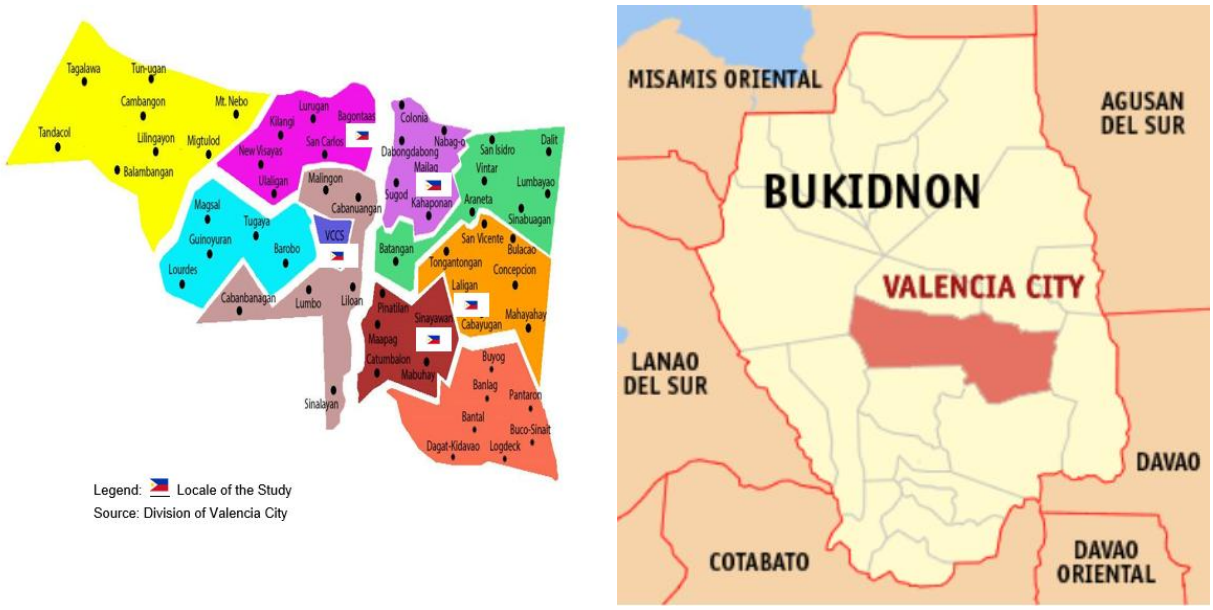
Valencia City is Bukidnon's commercial and agricultural hub. Its agricultural lands support rice, corn, sugarcane, and other high-value crops, and although urbanization has expanded in recent years, agriculture still occupies a substantial portion of the land area and provides livelihood and economic stability to many residents (Philippine Statistics Authority [PSA], 2023). This duality of urban and rural features makes the city a suitable context for examining how curriculum reforms such as MATATAG are implemented across schools with varying resources and community engagement. The city comprises 31 barangays, each a distinct social and political unit with its own elementary and secondary schools; many are predominantly rural and farming-dependent, and these socio-economic conditions influence the availability of learning materials, access to technology, and teacher workload, all critical to implementation.

The Division of Valencia City, under DepEd, supervises all public and private basic education institutions in the locality. It is organized into ten (10) educational districts, each managing curriculum delivery, teacher professional development, and school governance within its jurisdiction, and it actively supports DepEd reforms, including MATATAG (DepEd, 2023). The Division's schools therefore offer a rich environment for exploring how Grade 4 Mathematics teachers interpret, adapt, and enact the curriculum in diverse contexts. In sum, the intersection of urban development, agricultural livelihood, and educational reform makes Valencia City a microcosm of the challenges and opportunities facing Philippine basic education (Figure 2).

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Figure 2. **Locale of the Study: Valencia City Division, Bukidnon**



Note. Left: district map of the Division of Valencia City; flagged sites mark the locale of the study (source: Division of Valencia City). Right: location of Valencia City in Bukidnon Province (source: "Valencia City in Bukidnon Province," Wikipedia, via Wikimedia Commons, https://commons.wikimedia.org).

Participants and Sampling Procedure

The participants were twenty-five (25) Grade 4 Mathematics teachers from the Division of Valencia City, Bukidnon, purposively selected from seven (7) elementary school districts to ensure balanced representation of urban and rural school settings. Purposive sampling, a non-probability technique widely used in qualitative research, deliberately selects participants on criteria related to the study's objectives rather than by random selection (Palinkas et al., 2015). It allowed the researcher to identify information-rich cases, that is, teachers able to give detailed, contextualized accounts of their challenges, strategies, and reflections, in keeping with the qualitative goal of depth over breadth (Creswell & Poth, 2018).

The inclusion criterion was active implementation of the MATATAG Curriculum in the teacher's Grade 4 Mathematics classes during the study, which ensured direct, firsthand experience of the phenomenon. To capture the diversity of classroom realities, the selection included teachers from schools of varying enrollment size, resource level, and geographic location, so that the analysis could explore how community resources, administrative support, and student demographics shaped delivery of the curriculum. This variation enhanced the credibility and transferability of the findings. The researcher maintained a criterion-based approach, seeking teachers who had implemented the curriculum and were also willing to articulate their reflections openly, and the final 25 participants were intended to represent a balance of gender, teaching experience, and school type (urban or rural).

The selection process began with an official list of Grade 4 Mathematics teachers from the Division of Valencia City Office. With permission from school administrators and district supervisors, the researcher identified and invited eligible teachers through formal communication channels. Participants agreed voluntarily after being fully informed of the study's purpose, procedures, and ethical safeguards (Creswell, 2014). Participants were coded P1–P25 for reporting.

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Research Instruments

A researcher-developed qualitative questionnaire served as the primary instrument; its purpose was to elicit rich, descriptive narratives about teachers' lived experiences in implementing the Enhanced MATATAG Curriculum, aligned with the study's objectives on challenges, strategies, support systems, professional growth, and insights (Appendix B). The questionnaire had two parts. Part A gathered the respondents' demographic profile (gender, age bracket, highest educational attainment, total years of teaching, years teaching Grade 4 Mathematics, and participation in professional development related to the Enhanced Curriculum) to contextualize their experiences and to detect patterns related to professional background. Part B contained thirteen open-ended questions organized into five thematic sections:

- *Initial Encounters and Overall Perception*: teachers' early understanding, orientation, and initial reactions to the Enhanced Curriculum in Mathematics.
- *Challenges ("Counting Challenges")*: difficulties in pedagogy, assessment, resources, and learner-centered instruction.
- *Triumphs and Successes*: successful strategies, positive student outcomes, and professional growth.
- *Support Systems and Adaptation*: institutional and peer support received, and how teachers improvised or innovated to address gaps.
- *Synthesis and Forward Look*: reflections on the overall balance of challenges and achievements, and recommendations for curriculum improvement.

Every question was open-ended so that participants could respond freely in narrative form, an approach consistent with phenomenological inquiry, which seeks the essence of experience as the participants themselves describe it (Creswell & Poth, 2018). The questions were worded to avoid bias, suggestive phrasing, or leading cues. An Informed Consent Form accompanied the instrument and explained the purpose of the study, the voluntary nature of participation, data confidentiality, potential risks, and the right to withdraw at any time.

To establish content validity and clarity, the questionnaire was reviewed by three experts: a curriculum specialist, a mathematics education expert, and a qualitative research methodologist. Their feedback was used to refine the language, sequence, and scope of the questions; minor revisions improved coherence and contextual appropriateness for Grade 4 Mathematics teachers in the Philippine setting. Completing the questionnaire took approximately 30 to 45 minutes, and teachers worked at their own pace to allow thoughtful reflection. In some cases, follow-up clarification interviews verified or expanded certain responses, increasing data richness and trustworthiness (Merriam & Tisdell, 2016). Individual interviews used a researcher-developed interview guide derived from the validated questionnaire.

Data Gathering Procedure

Data gathering was systematic and used multiple methods to achieve triangulation, the validation of findings by comparing evidence from different sources or techniques (Denzin, 2012). Before data collection, the researcher obtained formal approval from the Schools Division Superintendent of the Division of Valencia City and from the principals of the participating schools, which secured institutional support and compliance with DepEd research policies (Appendix 1–2 of the dissertation). The researcher then coordinated with the selected teachers through formal letters and personal communication to explain the purpose, scope, and ethical safeguards of the study. An orientation session presented the study's objectives, procedures, and participants' roles, and the Informed Consent Form was introduced, detailing voluntary participation, confidentiality, anonymity, and the

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right to withdraw without penalty. Only participants who voluntarily signed the form were included (Creswell & Poth, 2018).

Primary data were gathered through semi-structured interviews, focus group discussions (FGDs), and open-ended written questionnaires, deliberately combined to achieve methodological triangulation, the use of multiple qualitative methods to explore the same phenomenon from different perspectives (Fetters et al., 2013). Each participant was interviewed individually, face-to-face or through online platforms depending on availability and school schedules, for approximately 45 to 60 minutes. The semi-structured format allowed participants to elaborate while the researcher probed emerging themes, and with consent, the interviews were audio-recorded for accurate transcription. Afterward, the researcher conducted two FGDs of 8–10 participants each to validate and enrich the interview data by letting participants share, reflect, and react to one another's experiences, which surfaced shared meanings, common challenges, and varied coping mechanisms; notes and recordings from the FGDs served as supplementary sources for thematic triangulation. Participants also completed the open-ended written questionnaire, which captured reflective written responses and helped cross-verify themes from the oral narratives; some participants who were less expressive in interviews gave more detailed accounts in writing. Throughout, field notes recorded contextual observations, non-verbal cues, and researcher reflections as an auxiliary data source.

After data collection, the researcher transcribed the recorded interviews and FGDs verbatim and checked the transcripts for accuracy by replaying the recordings and comparing them with field notes. For participant validation (member checking), selected participants reviewed their transcribed responses and preliminary interpretations to confirm accuracy and authenticity (Lincoln & Guba, 1985), and their clarifications and corrections were integrated into the final transcripts.

Data Analysis

The data were analyzed thematically to identify recurring patterns, meanings, and experiences among Grade 4 Mathematics teachers implementing the MATATAG Curriculum. All interview, FGD, and questionnaire responses were transcribed verbatim and imported into MAXQDA Analytics Pro 2022 for organization and coding. The software helped highlight key statements, cluster similar responses, and generate preliminary categories reflecting shared experiences, and its visualization tools helped determine relationships among themes. Analysis followed the six phases of Braun and Clarke (2006): familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Codes and categories were refined continuously until major themes emerged, organized according to the study's research questions: the common challenges of implementation, the strategies and innovations used to address them, and the support systems available to teachers. Summarized codes were grouped into categories and then distilled into themes (Saldaña, 2021; Miles et al., 2018).

Interpretation was guided by experiential learning and reflective practice (Kolb, 2015; Schön, 1983), which provided a lens for understanding how teachers learned and adapted through experience: their challenges represented concrete experiences, their reflections illustrated personal and professional insights, and their strategies demonstrated active experimentation and growth. This process allowed the researcher to construct a holistic understanding of the experiences, to propose intervention programs, and to consolidate the findings in the Experiential Learning and Reflective Practice (EL-RP) Model (Figure 3).

Trustworthiness

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Credibility, dependability, and confirmability were pursued through triangulation of data sources (interviews, FGDs, and written responses), participant validation, and cross-checking of themes (Denzin, 2012; Merriam & Tisdell, 2016). Comparing data across methods and participants allowed the researcher to validate recurring themes and reduce potential bias. The combination of individual and group perspectives, written and oral narratives, and the researcher's field-note reflections gave a multi-dimensional picture of teachers' experiences and strengthened the authenticity and reliability of the findings. Purposive variation in school type, location, and resources supported transferability.

Ethical Considerations

The study complied with ethical standards for research involving human participants (Creswell, 2014). Permission was obtained from the Schools Division Superintendent and school principals; participation was voluntary and based on signed informed consent; participants could skip any question or withdraw at any time without penalty. Pseudonyms or code identifiers were used to protect identities, and all data were treated confidentially, with digital files password-protected and physical copies kept in a locked cabinet.

Scope and Delimitations

The study focused on the lived experiences of Grade 4 Mathematics teachers implementing the Enhanced (MATATAG) Curriculum in selected public elementary schools, and centered on teachers' narratives and reflections. It examined their challenges, strategies, support systems, and professional growth, and identified insights for curriculum enhancement and intervention programs. The inquiry was limited to Grade 4 Mathematics teachers because Mathematics at this level bridges basic numeracy and more abstract reasoning: teachers must move learners from concrete computation to conceptual understanding, a focal emphasis of the curriculum. Other grade levels and subject areas were not included, which allowed deeper exploration of the pedagogical adjustments, resource use, and learner engagement specific to Mathematics instruction.

Because the study adopted a qualitative phenomenological approach, which seeks meaning through participants' lived experiences rather than numerical measurement, its findings are context-specific and interpretive rather than generalizable to all teachers or schools. This limits statistical generalizability but strengthens the depth and authenticity of understanding. Further limitations arose from participant availability, time constraints, and variability in school contexts; teachers' openness may have been influenced by workload, administrative expectations, or perceived sensitivities about curriculum implementation; and the focus on a defined geographic area may not capture the diversity of experiences across regions or socio-economic conditions.

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RESULTS

The results are presented in relation to the six research questions. Thirteen transcript-and-coding frames (Appendix A) record the 25 participants' responses to the thirteen open-ended questions of Part B of the instrument (Appendix B); Tables 1–6 present the summarized codes, categories, and themes for each research question. Participant numbers in parentheses (e.g., P9 or "Participants 2, 6, 9") refer to the row order of the participants in the frames. Quotations are reproduced verbatim from the transcripts, which were generated from audio recordings and may retain transcription irregularities. Themes emerged from teachers' narratives; their relationship to the literature and to theory is taken up in the Discussion.

Teachers' Initial Understanding and Comparative Perspectives

Participants' accounts opened with a consistent picture of how they first understood the Enhanced Curriculum (Frame 1). Teachers recognized its philosophy as a shift away from rote memorization toward mastery and meaningful understanding. Many reported a common trajectory: they first took it for "a minor update" and then realized that its focus was deeper, a realization clarified by the orientation sessions, which helped them see the value of promoting problem-solving and critical thinking. This realization produced mixed emotions, namely excitement about the potential benefits and apprehension about the added demands on them as facilitators. Further codes recorded that the change was at times overwhelming yet rewarding when students succeed, that adjustment took time, that the extra effort was believed to benefit learners in the long run, and that initial nervousness gave way to positive results in class.

Asked how the Enhanced Curriculum differs from the previous one (Frame 2), teachers described changes in four interconnected domains. In *pedagogical approach*, instruction moved from direct lectures to inquiry-based learning with discussion. In *cognitive and content focus*, the curriculum requires fewer competencies per term but demands deeper mastery, with a stronger emphasis on reasoning and on explaining steps. In *contextualization*, it prioritizes real-world application by connecting concepts to daily life. In *assessment*, it has broadened from written quizzes to performance tasks. The accompanying affective responses were initial anxiety that often gave way to a sense of reward as positive results appeared, even though the journey was described as overwhelming at times.

Research Question 1: Common Challenges

Teachers described feelings of uncertainty, adjustment difficulties, and overwhelming workloads as they adapted to new content standards, pedagogical expectations, and assessment schemes. Several said the abrupt transition created a "gray area" in understanding the scope and sequence of lessons, particularly in aligning learning competencies with available materials. Table 1 summarizes the challenges; the sections below present them by domain.

Pedagogical challenges

The most frequently cited challenge was the transition from direct instruction to facilitating inquiry-based, learner-centered learning (Participants 2, 6, 9, 11, 13, 14, 23, 24, 25; Frame 3). It involved a change of role, as in "shift from being the giver of knowledge to the facilitator of learning" (P9), and also difficulty balancing explicit instruction with inquiry (P11), adjusting to new lesson-plan formats (P3), and guiding students without giving direct answers while managing classroom dynamics (P24). Instructional differentiation for diverse learners was the second major concern (Participants 1, 4, 5, 13, 18, 20, 21, 22, 23, 25). Teachers faced structural and resource constraints, including large class sizes (Participants 2, 21), limited technological access (Participants 5, 17, 23), and insufficient teaching materials (Participants 2, 19, 22). They also reported temporal pressure: the long preparation time that inquiry-based lessons require (Participants 5, 7, 23, 25) and the conflict between covering extensive content and ensuring mastery (Participants 11, 12, 13), captured in the remark about the "pressure to

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cover extensive content within a limited timeframe" (P12). Finally, teachers expressed the need for continuous professional development and support to build capacity (Participants 4, 7, 8, 16, 25).

Resource and content challenges

Material and resource scarcity was the most pervasive theme in Frame 4. Participants described a lack of updated, curriculum-aligned textbooks (Participants 3, 10, 14), for example, "There were no books for mathematics aligned with the new curriculum." (P14) They also reported insufficient manipulatives and concrete teaching aids (Participants 8, 9, 11, 19) and limited access to functional technology and reliable internet (Participants 9, 13, 20); one participant named a shortage of paper for printing activity sheets as the only challenge: "The only challenge was the availability of paper that will be used to print the learning activity sheets." (P21) A sub-theme was improvisation and personal burden: teachers spent personal funds (P5), invested considerable time making their own materials (Participants 1, 3, 16, 17, 22), or sought supplementary resources online (Participants 3, 14). One participant reported no major resource difficulty because real objects were used in place of abstract materials.

The second theme concerned content complexity compounded by learner unpreparedness. Teachers noted the increased depth and abstract nature of the content (Participants 4, 16, 24), which required additional effort to simplify, and a readiness gap in which learners struggled with foundational skills such as number sense and with mathematical language (Participants 7, 12, 18), forcing extra remedial time (P12).

Learner-centered challenges

Teachers described the shift to learner-centered instruction as making classrooms more active, interactive, and engaging (Participants 2, 11, 14, 25), and as strengthening teacher–learner relationships (P7), but three challenges stood out (Frame 5). The first was managing learner diversity in readiness, prior knowledge, pace, and style (Participants 1, 4, 6, 8, 16, 24), which created tension in pacing: preventing advanced learners from becoming bored while giving slower learners enough support (Participants 6, 16, 24), as in "The main challenge of ensuring that all students especially slow learners can keep up with the pace while still achieving the desired competencies" (P4). The second was the complexity of facilitation and classroom management: active, collaborative, and often noisy group work (Participants 3, 10, 14) demanded sophisticated management, especially in large classes (Participants 7, 13, 19). The third was the transformation of the teacher's role from "sole source of knowledge" to "facilitator of learning" (Participants 13, 14, 15), which required individualized support, timely feedback, and differentiated activities (Participants 8, 9, 12, 22), all more time-intensive to plan and deliver (Participants 10, 14). One participant (P5) also raised the department's performance target and the need to avoid overloading teachers.

Assessment challenges

Assessment challenges clustered in three domains (Frame 6). The first was logistical and resource burden: performance-based and authentic assessments were described as time-intensive to prepare, administer, and grade (Participants 1, 3, 4, 6, 13, 16, 17, 19, 24), compounded by a lack of clear rubrics and reliable technology for digital assessment (Participants 6, 7, 12, 24). The second was validity and reliability: concern over subjectivity in judging complex tasks (P13), fairness and accurate measurement across diverse learners (Participants 4, 13), and alignment of assessments with the cognitive demands of the competencies (P20). The third involved student-related barriers: gaps in conceptual understanding that prevented learners from demonstrating proficiency in multi-step problems (Participants 9, 12, 18, 23) and the difficulty of monitoring individual progress in large classes (Participants 14, 23, 24). Representative comments included "In monitoring students' progress, which is time-consuming and difficult to manage, especially with a lack of clear rubrics." (P19) and "I worry about the emphasis on standardized testing as it doesn't always capture the full range of my students' abilities." (P22). Some teachers saw the value of the new methods but compromised or reverted to more manageable summative tests (P20).

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Table 1. Common Challenges Faced by Grade 4 Mathematics Teachers in Implementing the MATATAG Curriculum

Summarized codes	Category	Theme
Diverse learner needs (slow learners, advanced learners)	Learner Diversity	Differentiated learning challenges
Limited instructional materials and manipulatives	Resource Constraints	Inadequate teaching resources
Time constraints for lesson planning and curriculum coverage	Planning & Workload	Curriculum pacing and workload management
Integrating new pedagogies and assessment methods	Pedagogical Adaptation	Transition to inquiry-based and learner-centered teaching
Students' foundational skills gaps	Learner Preparedness	Varied readiness levels affecting learning
Managing classroom engagement and motivation	Classroom Management	Engaging learners effectively

The challenges in Table 1 operate at three levels. At the *student* level are differentiated learning needs and varied readiness; at the *teacher* level, the transition to inquiry-based teaching and the engagement of learners; and at the *system* level, inadequate resources and the management of pacing and workload.

Research Question 2: Strategies and Innovations

Successful strategies. Teachers described a repertoire of strategies aligned with the curriculum's goals (Frame 7). The most prevalent theme was real-world and contextualized application: simulations such as a "math market" for buying and selling (Participants 4, 9, 13) and project-based tasks such as designing a dream home within a budget (P22). The second was collaborative and active learning structures: math learning stations and small-group work (Participants 1, 3), collaborative problem-solving (Participants 11, 16), and brainstorming (P23); for example, "Students work together to solve math problems and explain the answer to the class." (P16) The third was structured conceptual development, notably the Concrete–Pictorial–Abstract (CPA) approach (Participants 11, 18), together with visualization through pictures, drawings, and diagrams (Participants 6, 24) and hands-on manipulatives (Participants 8, 18). Reported outcomes included increased engagement, improved conceptual understanding, and growth in confidence and communication.

Improvisation. Teachers also described improvising to overcome material gaps (Frame 11), most often with hands-on, kinesthetic learning using do-it-yourself and locally sourced manipulatives, with particular attention to fractions, multiplication, and geometry. Three approaches overlapped. The first was the *creation of substitute manipulatives* from recycled or low-cost items such as bottle caps, paper plates, and cardboard (Participants 1, 3, 4, 11, 13, 17) and from everyday objects such as fruit and cake (Participants 7, 24); for example, "One time I

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improvise by using bottle caps and local plastics manipulatives to teach multiplications and divisions since standard learning materials were unavailable." (P4) The second was *contextualization and simplification*: embedding concepts in real-life scenarios and storytelling (Participants 7, 14, 18, 19), simplifying problem difficulty (Participants 12, 21, 23), and using alternative methods to build conceptual understanding before abstract rules (Participants 14, 18, 20). The third was *embodied and kinesthetic learning*, such as having students form angles with their arms (P22) or physically partition and recombine numbers (P25). Teachers reported increased engagement, improved conceptual grasp, and more active participation.

Table 2. **Strategies or Innovations Employed by Teachers**

Summarized codes	Category	Theme
Math learning stations, group problem-solving	Collaborative & Active Learning	Student-centered instructional strategies
DIY/manipulatives using recycled/local materials	Resourcefulness & Improvisation	Creative teaching solutions with limited resources
Real-life applications and role-playing activities	Contextualized Learning	Making mathematics relevant and meaningful
Concrete-Pictorial-Abstract approach	Multi-modal Teaching	Visual and hands-on strategies for conceptual understanding
Games and problem-solving challenges	Engagement Strategies	Enhancing participation and motivation
Differentiated instruction and pacing	Instructional Adaptation	Tailoring tasks to learner abilities
Brainstorming and group discussions	Collaborative Learning	Promoting critical thinking and idea sharing

Table 2 shows that these strategies were deliberate responses to the challenges in Table 1. Student-centered strategies and the promotion of critical thinking address the pedagogical shift; creative solutions with limited resources and visual, hands-on strategies address resource gaps; and contextualized learning, games, and role-play address the affective domain by building interest, motivation, and a positive disposition toward Mathematics.

Research Question 3: Forms of Support and Their Effects

Teachers described support from three domains (Frame 10). *Collaborative and professional learning structures* were most often cited as beneficial: LAC and School LAC (SLAC) sessions for peer learning, lesson planning, and problem-solving (Participants 1, 3, 6, 11, 24), and informal mentoring and collaboration with colleagues (Participants 1, 2, 9, 12, 13, 16, 17, 18, 22, 25). As one teacher put it, "Collaborations with colleagues through sharing strategies and best practices also made teaching more effective." (P17) *Formal training and administrative backing* included trainings, workshops, and seminars (Participants 2, 3, 7, 10, 11, 12, 14, 15, 16) and administrative actions such as monitoring, feedback, and provision of some materials (Participants 3, 9, 16, 17,

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20). *Material and logistical support* included curriculum guides, textbooks, and digital resources (Participants 4, 5, 8, 19, 23); one teacher (P8) cited the use of Khan Academy in selected classes, and one (P9) cited parental support in providing classroom needs.

At the same time, teachers' accounts of needed support revealed significant deficits in the third domain. They called for localized materials, reliable technology, gadgets, and high-speed internet to implement the curriculum's digital and hands-on components (Participants 4, 6, 7, 8, 16, 22, 23, 24) and for reduced administrative tasks to free time for instruction (P18).

Table 3. **Forms of Support and Their Effects on Implementation**

Summarized codes	Category	Theme
Professional development (trainings, workshops, seminars)	Capacity Building	Enhancing teaching skills and pedagogy
Peer collaboration and sharing best practices	Teacher Collaboration	Knowledge exchange and co-planning
Administrative support (provision of materials, feedback, mentoring)	Institutional Support	Enabling effective curriculum implementation
Government support (curriculum guides, standards, digital platforms)	Policy & Resources	Alignment with national standards
Technology integration (e.g., Khan Academy, gadgets)	Digital Support	Enhancing student engagement and learning

As Table 3 shows, support operates at several levels: policy and resources from government agencies provide the framework; institutional support from school administration translates policy into practice; capacity building and teacher collaboration directly affect teacher efficacy; and digital support cuts across them as an enhancer. Teachers valued most the support that was ongoing, collaborative, and tied to daily practical challenges.

Research Question 4: Influence on Instructional Practices and Professional Development

Observed student outcomes. Most teachers reported increased student engagement, confidence, and a more positive attitude toward Mathematics (Participants 1, 2, 3, 4, 7, 10, 11, 12, 16, 17, 22, 24, 25), often linked to collaborative activities and real-life applications (Participants 1, 9, 12, 13, 16, 17, 23, 24; Frame 8). Outcomes fell into three domains: *affective and motivational* shifts from apprehension or indifference to enjoyment, interest, and confidence (Participants 1, 2, 6, 7, 10, 12, 16, 17, 20, 22, 24, 25); *behavioral and participatory* changes such as active participation, willingness to work in groups, and volunteering explanations (Participants 1, 3, 4, 12, 14, 16, 17, 23); and *cognitive and conceptual* gains in understanding, real-world application, and metacognition (Participants 6, 9, 13, 18, 20, 21, 24). For example, "Learners have become more active and confident during math discussions and activities." (P12). A smaller number of teachers observed no significant positive changes, attributing this to persistent foundational skill gaps (Participants 5, 8, 19); one teacher wrote "I have not observed significant positive changes yet." (P8)

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Professional growth. Teachers described growth in four interconnected domains (Frame 9). The most prominent was *pedagogical shift and role transformation* from lecturer or "dispenser" of knowledge to facilitator and designer of learning (Participants 2, 3, 11, 13, 25); one teacher said the curriculum "forced me to evolve from dispenser to a pedagogical facilitator which has been deeply transformative" (P25). Second was *enhanced instructional design skills*, with greater creativity, flexibility, and skill in contextualized lessons, visual aids, and real-world projects (Participants 1, 4, 6, 8, 13, 16, 22). Third was growing *mastery of differentiation and assessment* (Participants 4, 6, 15, 20, 24, 25). Fourth was *reflective and collaborative practice*, with more reflection, engagement with colleagues, and participation in continuing professional development (Participants 10, 12, 14, 17, 19, 22, 23). Another teacher said, "It has made me a more reflective, resourceful, and responsive teacher" (P12).

Balancing challenges and triumphs. Asked to weigh the two (Frame 12), the large majority of teachers affirmed that the benefits justified the hardships (Participants 1, 2, 3, 4, 6, 8, 10, 11, 16, 17, 22, 24), while a minority said persistent issues with student performance and readiness tempered their sense of triumph (Participants 5, 23). On the challenge side, teachers cited the time and effort of planning and adaptation (Participants 3, 6, 7, 12, 20, 22), systemic resource limits (Participants 4, 6, 20, 25), and the difficulty of addressing diverse learner needs (Participants 4, 7, 9, 12, 20). On the triumph side were *student outcomes*, namely deeper conceptual understanding and critical thinking (Participants 11, 15, 20, 24), engagement and positive attitudes (Participants 4, 6, 16, 17, 22), and real-world problem-solving (Participants 4, 11, 15, 17); and *teacher growth*, namely creativity, adaptability, resourcefulness, and reflection (Participants 3, 7, 12, 19, 25). One teacher described the experience as "though the journey has been a balancing act requiring adaptability and resilience" (P13).

Table 4. **Influence on Instructional Practices and Professional Development**

Summarized codes	Category	Theme
Shift from teacher-centered to learner-centered approach	Pedagogical Growth	Facilitating inquiry and active learning
Creative lesson planning and use of visuals	Instructional Innovation	Adapting to diverse student needs and resources
Reflective practice and professional growth	Professional Development	Continuous improvement and skill enhancement
Increased confidence in teaching and problem-solving	Personal Growth	Teacher empowerment and adaptability
Collaborative design of lessons and assessments	Peer Learning	Strengthening team-based teaching

Research Question 5: Insights for Curriculum Improvement and Support Systems

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Teachers' recommendations (Frame 13) were directed at curriculum planners, school leaders, and fellow teachers, and targeted three leverage points. *Systemic and resource support* called for adequate and timely resources: physical and digital manipulatives (Participants 2, 6, 8, 19, 20), localized and contextualized materials reflecting Philippine culture and contexts (Participants 4, 7, 11, 13, 23), and reliable access to technology (Participants 6, 8, 17, 24). *Capacity building and professional growth* called for ongoing, practical training on differentiated instruction, new teaching methods, and technology integration (Participants 1, 2, 4, 8, 16, 17, 23, 25) and for structured collaboration and sharing of best practices (Participants 6, 7, 8, 12, 13, 17, 20, 22, 23, 24). For example, "I recommend providing more teacher training and updated learning materials for effective implementation." (P16) Another added, "Teachers should continue collaborating and sharing ideas to address challenges and improve lessons." (P24) *Curriculum and pedagogical refinement* included simplifying and prioritizing competencies to keep them developmentally appropriate (Participants 12, 14, 19), strengthening vertical articulation between grade levels (P20), and fostering positive, inquiry-friendly learning environments that build student confidence (Participants 3, 18).

Table 5. Insights for Curriculum Improvement and Support Systems

Summarized codes	Category	Theme
Need for localized, culturally relevant materials	Curriculum Content	Contextualization of learning resources
Sequence and prioritization of learning competencies	Curriculum Design	Scaffolding and age-appropriate pacing
Ongoing teacher training and workshops	Teacher Support	Continuous professional development
Provision of manipulatives and technology tools	Resource Support	Ensuring access to adequate teaching tools
Encouraging collaborative teacher culture	School Culture	Mentoring, coaching, and shared practices
Integration of real-life examples	Instructional Relevance	Making learning meaningful and engaging

These insights address the relevance of the curriculum itself (contextualized resources and meaningful learning), its internal architecture (scaffolded, age-appropriate pacing and a manageable scope of competencies), and the support surrounding the teacher (continuous professional development, adequate tools, and a collaborative school culture).

Research Question 6: Proposed Intervention Programs and the EL-RP Model

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Table 6 presents the intervention programs derived from the findings. They operate at three levels. At the *student* level, targeted support (remedial and enrichment sessions) addresses learner gaps, and experiential learning through hands-on, real-life mathematics projects promotes engagement, problem-solving, and application. At the *teacher* level, professional development on differentiated instruction, assessment, and technology strengthens capacity, while collaboration programs (peer mentoring, collaborative planning, and lesson study) encourage knowledge-sharing and team teaching. At the *resource and system* level, the production and provision of DIY and contextualized learning materials supports creative teaching, and a monitoring and assessment system for student progress tracks outcomes and informs teaching strategies.

Table 6. Proposed Intervention Programs Based on Results

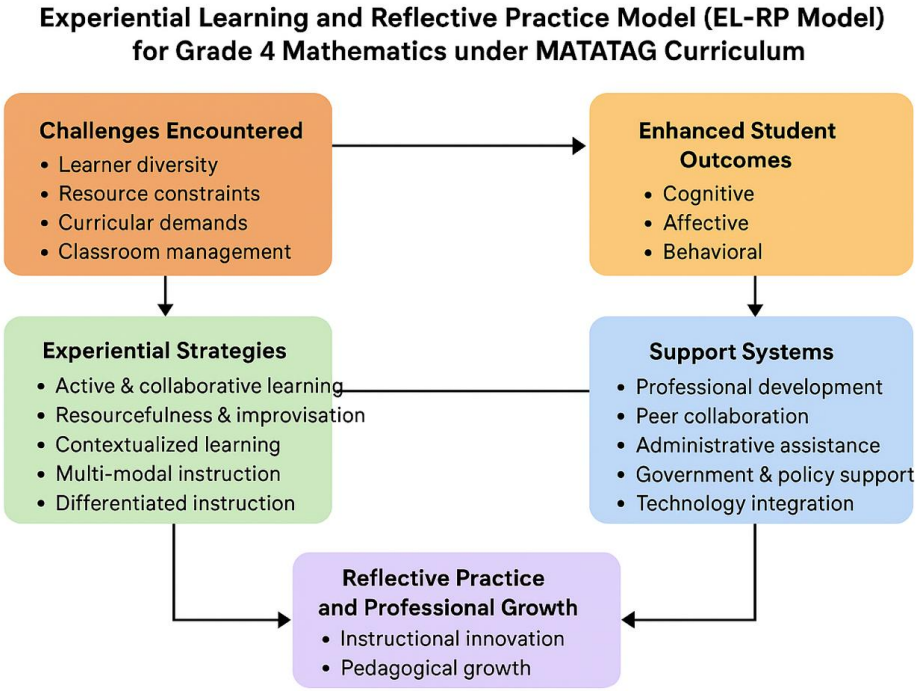
Summarized codes	Category	Theme
Remedial and enrichment sessions for diverse learners	Targeted Support	Addressing learner gaps and enhancing abilities
Teacher trainings on differentiated instruction, assessment, and technology use	Professional Development	Strengthening teacher capacity
Production and provision of DIY and contextualized learning materials	Resource Intervention	Supporting creative and contextualized teaching
Peer mentoring, collaborative planning, and lesson study programs	Collaboration Programs	Encouraging knowledge-sharing and team teaching
Hands-on, real-life mathematics projects	Experiential Learning	Promoting engagement, problem-solving, and application
Monitoring and assessment system for student progress	Evaluation Programs	Tracking learning outcomes and informing teaching strategies

The findings were consolidated in the Experiential Learning and Reflective Practice (EL-RP) Model for Grade 4 Mathematics under the MATATAG Curriculum (Figure 3). The model depicts a dynamic, cyclical process connecting teacher and student experiences through iterative reflection and adaptation. *Challenges Encountered* (learner diversity, resource constraints, curricular demands, and classroom management) form the initial problem space. Teachers respond with *Experiential Strategies* (active and collaborative learning, resourcefulness and improvisation, contextualized learning, multi-modal instruction, and differentiated instruction). These strategies are refined through *Reflective Practice and Professional Growth* (instructional innovation and pedagogical growth), leading to *Enhanced Student Outcomes* in the cognitive, affective, and behavioral domains. The cycle is sustained by *Support Systems* (professional development, peer collaboration, administrative assistance, government and policy support, and technology integration).

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Figure 3. Experiential Learning and Reflective Practice Model (EL-RP Model) for Grade 4 Mathematics under the MATATAG Curriculum



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DISCUSSION

Summary of Principal Findings

This study examined how Grade 4 Mathematics teachers in the Division of Valencia City experienced the initial implementation of the Enhanced (MATATAG) Curriculum. Teachers reported challenges that were primarily pedagogical and systemic: a difficult shift to inquiry-based, learner-centered instruction; scarce aligned materials and technology; diverse learner readiness in large classes; and time-intensive performance-based assessment. They responded with context-sensitive strategies, including collaborative learning structures, real-world contextualization, the Concrete–Pictorial–Abstract (CPA) approach, and do-it-yourself manipulatives. LACs and colleagues were the most valued supports, yet material and logistical support was judged inadequate. Implementation also catalyzed professional growth and, in most teachers' judgment, the triumphs outweighed the challenges. The sections below interpret these findings against the literature and theory.

Initial Encounters and Perceived Differences from the Previous Curriculum

Teachers' first reactions, in which an initial underestimate ("a minor update") was followed by recognition of a deeper philosophical shift, suggest that the curriculum acted as a "disorienting dilemma" that began a process of transformative learning (Mezirow, 1991). Orientation sessions served as meaning-making interventions that disrupted the incremental-change paradigm teachers had been operating within. The mix of excitement and apprehension is consistent with the early stages of the Concerns-Based Adoption Model (Hall & Hord, 2020): teachers' focus on the personal demands of facilitation ("How will this affect me?") reflects Personal Concern (Stage 2), while their growing grasp of the curriculum's operations signals emerging Management Concern (Stage 3). They had not yet moved fully to concerns about consequences for students or collaboration. This pattern suggests that the initial professional development built awareness but needed to be followed by sustained support to help teachers manage implementation and build efficacy (Fullan, 2007).

The comparative accounts describe a move from a "culture of coverage" to a "culture of comprehension." The pairing of fewer competencies with deeper mastery reflects the "less is more" principle advanced by reform movements (National Council of Teachers of Mathematics [NCTM], 2000), and the intertwined emphasis on inquiry, reasoning, and real-world application maps onto the five strands of mathematical proficiency: conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition (Kilpatrick et al., 2001). Inquiry and reasoning invest in adaptive reasoning and strategic competence; deeper mastery and explaining steps foster conceptual understanding and procedural fluency; real-world application builds productive disposition; and performance-based assessment is better suited than quizzes to evaluating these strands. Teachers' initial anxiety followed by observed positive results suggests that, despite implementation difficulties, the curriculum is having its intended effect on engagement.

Challenges: An Implementation Gap

Taken together, the challenges show a misalignment between the curriculum's pedagogical ambitions and the capacity of the surrounding system. The role change from "giver of knowledge" to "facilitator of learning" and the struggle to balance explicit instruction with inquiry indicate professional dissonance and a "practice shock" in which willingness to innovate is bottlenecked by time, resources, and heterogeneous readiness (Fullan, 2016). The lesson-plan format difficulties and calls for continuous professional development fit Fullan's account of change as a subjective process in which success depends on teachers finding new meaning, supported by capacity building (Fullan, 2016).

The resource findings are best read as a systemic failure of provision rather than an individual shortcoming. Through the lens of the Resource-Based View (Barney, 1991), textbooks, manipulatives, technology, localized

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teacher guides, and budget for printing are strategic assets without which the curriculum cannot yield its intended outcomes; when teachers become the primary resource providers, quality depends on personal capacity and goodwill, which is an equity issue. The curriculum also creates a pedagogical paradox: abstract, deeper content must be taught for conceptual understanding without the manipulatives and visualization tools designed to support it, which may push teachers back toward rote methods and undermine the goal of higher-order thinking.

The learner-centered challenges are classic dilemmas of constructivist implementation. The wide variation in prior knowledge and readiness corresponds to differing positions within students' zones of proximal development (Vygotsky, 1978), so that providing individualized scaffolding is, in effect, mediating learning across some 25 zones at once, which becomes far harder in large, diverse classes. Without smaller classes, training in differentiation, and planning time, the vision of a learner-centered classroom may be unsustainable, and practice may only partly fulfill the curriculum's constructivist aims. In assessment, the findings reveal an "assessment-practice gap." The curriculum's methods, including ongoing assessment with quantitative and qualitative data and meaningful feedback, are core principles of Assessment for Learning (Black & Wiliam, 2009), yet the time required for preparation and grading, the difficulty of timely feedback, and the struggle to monitor individual progress in large classes undermine the formative function. Teachers who see the value of the new methods but fall back on summative tests risk burnout and assessment data that do not fairly capture learning.

Overall, the picture is of an "implementation gap" between the curriculum as written and as enacted (Fullan, 2007), consistent with the Theory of Alignment, which holds that outcomes depend on coherence among standards, curriculum, instruction, assessment, and professional development (Webb, 1997). The demand for differentiated, inquiry-based learning presumes a well-resourced environment with small classes and highly trained teachers, and closing the gap requires a systems-level response of strategic investment in materials, review of pacing for feasibility, and stronger support for managing learner diversity (Darling-Hammond et al., 2017).

Strategies and Innovations: Teacher Agency

Teachers' strategies show them "localizing" the curriculum's philosophy into feasible classroom practice. The prominence of real-world contexts and collaborative problem-solving, as in the "math market" and "dream home" activities, illustrates Situated Learning Theory, in which learning is a social process embedded in context and community (Lave & Wenger, 1991); in such authentic activities, collaboration and application are the mechanisms of learning rather than mere motivators. The CPA approach and visualization techniques align with Cognitive Apprenticeship, in which teachers make thinking visible by moving from concrete actions to pictorial representations and abstract symbols (Collins et al., 1991), and the group-based strategies embody the social constructivism of Vygotsky (1978). Teachers were not passively resisting change; they were engaged in a process of "pedagogical bricolage" (Huberman, 1993), assembling effective learning experiences from the materials and contexts available to them.

The improvisation findings suggest that these acts were sophisticated adaptations and not stopgaps. Handmade manipulatives and realia bridge the concrete–representational–abstract continuum for young learners (Boggan et al., 2010), and teachers diagnosed learning obstacles, such as the abstract nature of fractions or angles, and engineered solutions that may be more culturally relevant than pre-fabricated kits. Folding paper into fractions, forming angles with the arms, and partitioning bottle caps are applications of Embodied Cognition, which holds that cognitive processes are rooted in the body's interaction with the world (Wilson, 2002; Nathan, 2014). The improvised materials also act as external tools that scaffold students' mental processes, consistent with Distributed Cognition (Hutchins, 1995), and they may foster greater equity in the classroom (Larnell et al., 2016). At the same time, the heavy reliance on personal time and funds shows that these triumphs are being financed by teacher goodwill.

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Support Systems

The structural and social scaffolds for implementation appear partly in place, but material and technological infrastructure remains inadequate. The high value placed on LAC sessions and colleague collaboration indicates an active professional learning community (DuFour, 2004; Darling-Hammond et al., 2017) that is a significant asset, and the emphasis on peer collaboration and administrative backing suggests that, while top-down policy and resources are necessary, the school-based network is the most immediate and impactful enabler. Yet persistent calls for basic resources, functional technology, and time free of administrative duties indicate over-reliance on teacher ingenuity and peer support to compensate for resource gaps (Kraft & Papay, 2014), with possible variation in implementation fidelity and increased burnout.

The Job Demands–Resources model (Bakker & Demerouti, 2017) helps explain this pattern. The curriculum raises job demands (new pedagogical skills, more complex planning, differentiation), and the supports teachers identified (collaboration, training, and administrative backing) are job resources that buffer those demands. Resources matter most when demands are high, but here some resources are present (collaboration), and others are lacking (materials, technology, time), so demands may overwhelm resources and cause strain. The plea to reduce administrative tasks (P18) is a plea to lower hindering demands, in line with the principle that resources should both add support and mitigate obstructive demands (Van den Broeck et al., 2010). Sustainable implementation therefore requires comprehensive support that provides materials and technology and protects teachers' time and cognitive resources through supportive leadership and efficient administration (Leithwood et al., 2020).

Instructional Practice, Student Outcomes, and Professional Growth

The principal triumph reported was not simply higher test scores but a more productive and positive mathematical identity among students. The shifts from fear to enjoyment and confidence suggest the curriculum's approaches are reducing Mathematics anxiety and building self-efficacy, a precondition for deeper learning, and increased collaboration and willingness to explain solutions point to a classroom culture that values process and reasoning. These outcomes correspond to the behavioral, emotional, and cognitive dimensions of student engagement (Fredricks et al., 2004), indicating a holistic enhancement of engagement in the Mathematics classroom. The minority who saw no positive change attributed this to foundational skill gaps, a reminder that engagement gains cannot substitute for foundational support.

Teachers' professional growth appears as an identity reconstruction. The consistent movement from "dispenser" to "facilitator" and the emphasis on creativity, flexibility, and reflection point to "adaptive expertise," the ability to innovate in response to novel problems rather than apply routines (Hatano & Inagaki, 1986). Consistent with Transformative Learning Theory (Mezirow, 1991), the curriculum acted as a disorienting dilemma; through critical reflection, exploration of new roles, and dialogue with colleagues, teachers moved from seeing themselves as content deliverers to facilitators of learning, designers of experiences, and diagnosticians of student understanding. Good professional development, on this view, enables this transformative process rather than only adding skills.

The overall verdict, that benefits justified the difficulties, describes a "productive struggle" in which hardships such as differentiating and creating materials drive positive outcomes for students and teachers (Boaler, 2016), and in which success is redefined from coverage and procedural fluency to conceptual depth and critical reasoning. It also illustrates the "implementation dip," the predictable decline in performance and rise in challenges that precedes benefits in any significant innovation (Fullan, 2007). Teachers appear to be moving through the dip, helped by the growth and adaptability they report. Their reflections also suggest an implicit theory of change (Vogel, 2012) in which difficulties are preconditions for the longer-term goal of critical thinkers and lifelong

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learners, and the belief that the curriculum's underlying logic is sound while the pathway requires further resources and training.

Insights for Curriculum Improvement and Intervention

Teachers' recommendations place the implementation problem in the support system rather than in the curriculum's philosophy: policy ambition has outpaced practical scaffolding. Calls for localized, contextualized materials seek to reconcile a standardized national curriculum with learners' diverse real-world contexts, which is the aim of culturally responsive pedagogy (Gay, 2018), and the emphasis on collaboration reflects an understanding that complex change requires a community of practice (Wenger, 1998). Through the Professional Capital framework (Hargreaves & Fullan, 2012), the recommendations address human capital (training), social capital (collaboration, mentoring, and sharing), and decisional capital (localized materials, competency prioritization, and flexible delivery), and policymakers and school leaders must invest in all three (Darling-Hammond et al., 2017). The requests for aligned goals, effective instruction, and collaborative cultures correspond to the coherence framework (Fullan & Quinn, 2016), and a "co-design" approach in which resources and systems are developed with end-users follows from them.

The proposed interventions amount to a shift from ad hoc teacher resourcefulness to a systematic, institutionalized support structure. They are interconnected: collaborative planning produces better contextualized materials, and monitoring data inform targeted remedial sessions. They operationalize an integrated view of professional learning and system improvement in which curriculum, pedagogy, assessment, and professional learning are aligned within a supportive culture (Darling-Hammond et al., 2017), and their monitor-and-adjust logic parallels the Plan–Do–Study–Act cycle of improvement science (Bryk et al., 2015).

The EL-RP Model and the Affective Dimension of Teacher Experience

The EL-RP Model presents effective implementation as a continuous, reflective cycle of professional inquiry rather than the application of prescribed solutions, and positions teachers as agentic professionals who experiment with and refine practice in response to contextual challenges. It embodies Kolb's cycle (2015): experiential strategies correspond to concrete experience, reflective practice to reflective observation, pedagogical growth to abstract conceptualization, and refined strategies to active experimentation. It likewise operationalizes Schön's (1983) reflection-in-action, in which teachers adapt in real time, and reflection-on-action, in which they analyze practice afterward. The interplay of experimentation and reflection aligns with views of effective professional development as job-embedded, collaborative, and iterative (Darling-Hammond et al., 2017).

The findings also reveal the emotional labor and adaptive resilience in teachers' practice. Teachers described navigating the curriculum as both a test of endurance and a catalyst for renewal. They initially felt uncertainty in balancing coverage with conceptual understanding and frustration over limited resources, varied readiness, and high performance expectations; these obstacles became learning points that stimulated experimentation, collaboration, and reflective refinement. Many shared early self-doubt, then growing confidence as reflection let them interpret classroom outcomes and adjust, so that triumphs extended beyond student achievement to teacher efficacy, adaptability, and renewed professional purpose. This resonates with Schön's (1983) reflective practitioner and Kolb's (2015) view that transformation occurs when teachers connect reflection with experimentation; more recent studies likewise associate reflective practice with teacher agency and resilience in changing curricular contexts (Liu & Phelps, 2023; Sun et al., 2021). Collaboration through informal mentoring, co-planning, and professional learning communities turned individual struggles into collective success (Vescio et al., 2008; Sari et al., 2022), and institutional support from school heads and curriculum coordinators, in the form of feedback, in-service training, and digital materials, amplified that momentum. Educational transformation here is a cyclical journey of struggle, adaptation, and professional empowerment, not a linear process of compliance,

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and challenges become catalysts for innovation when mediated by reflective inquiry, collaboration, and supportive structures.

Implications

For practice, schools should protect time for LACs and treat them as genuine professional learning communities, provide coaching and mentoring, and audit administrative tasks. *For policy,* DepEd should supply aligned textbooks, teacher guides, and manipulatives on time, and should build formal feedback channels so that classroom experience informs curriculum refinement, since the implementation gap documented here is largely a resourcing and support gap. *For theory,* the EL-RP Model offers a framework for studying how teachers learn through curriculum change, joining experiential learning, reflective practice, and implementation theory. *For teacher education,* pre-service and in-service programs can build constructivist, inquiry-based, and assessment skills using the strategies teachers found workable.

Limitations and Directions for Future Research

The study is qualitative and phenomenological, so its findings are context-specific and interpretive and should not be generalized to all teachers or schools. Participant availability, time constraints, and variability among school contexts may have shaped the data, and teachers' candor may have been affected by workload, administrative expectations, or perceived sensitivity about curriculum implementation. The study covered a defined geographic area and one grade level and subject, and relied on teachers' self-reports; student outcomes were reported by teachers and not measured. Future work could use mixed-methods or quantitative designs to test and extend the themes, include other grade levels, subjects, and regions, and add classroom observation and student data. A longitudinal study could track the long-term effects of the MATATAG Curriculum on student achievement and teacher retention.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the findings, the study draws the following conclusions:

1. Implementing the MATATAG Curriculum presents Grade 4 Mathematics teachers with challenges that are primarily systemic and pedagogical. They are fundamental barriers, not mere inconveniences: the lack of essential instructional resources, the difficulty of managing learner diversity within large classes, and the heavy workload of designing and implementing constructivist, performance-based assessments. They significantly impede the translation of the curriculum's objectives into classroom practice.

2. Despite systemic constraints, teachers are active, resourceful agents of change who develop context-sensitive, innovative strategies to bridge policy and practice. Their triumphs are evident in localized manipulatives, collaborative learning structures, and real-world problem-solving activities. Teacher agency and pedagogical creativity are critical success factors that often compensate for systemic shortcomings and lead directly to observed improvements in student engagement and conceptual understanding.

3. Current support systems are partially effective but do not adequately address teachers' core material and logistical needs. Collaborative LAC sessions and some professional development are valued, but non-material support cannot substitute for material lack. The absence of adequate textbooks, technology, and teaching kits, together with overwhelming administrative tasks, creates an environment that over-relies

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on teacher voluntarism and personal investment, risking burnout and inequitable implementation across school contexts.

4. Implementing the Enhanced MATATAG Curriculum has a transformative impact on teachers' professional identities and practices. Teachers shift from traditional instructors to facilitators of learning and develop greater adaptability, reflectivity, and expertise in differentiated instruction. The reform is thus not only a change in content but a catalyst for continuous professional learning and identity reconstruction.

5. Teachers' lived experiences are an invaluable yet underutilized resource for sustainable curriculum reform. There is a critical disconnect between policy design and practical reality, and the curriculum must be informed by continuous, structured feedback from practitioners who can identify mismatches, contextual barriers, and effective practices.

6. Overall, teachers perceive the benefits of the Enhanced MATATAG Curriculum in fostering deeper understanding, critical thinking, and positive attitudes toward Mathematics to justify the implementation difficulties. This justification is contingent on adequate institutional support: the triumphs in student engagement and teacher growth show the curriculum's potential, but its long-term success and sustainability depend on addressing the systemic challenges of resources, support, and workload.

Recommendations

To address the findings and conclusions, the following are recommended:

1. *Pedagogical and assessment challenges.* DepEd and School Divisions should develop and disseminate a repository of model lesson plans, video demonstrations of inquiry-based teaching, and a bank of validated performance tasks with clear rubrics, coupled with mandatory, hands-on training on facilitating learner-centered discussion, differentiating instruction in large classes, and efficient formative assessment.

2. *Resource constraints.* DepEd should prioritize the timely development, procurement, and equitable distribution of MATATAG-aligned textbooks, teacher guides, and sets of mathematical manipulatives for all Grade 4 classes. A "Digital and Resource Grant" program should fund essential technology (e.g., tablets, projectors) and reliable internet connectivity, alongside training in the use of Open Educational Resources (OERs).

3. *Support systems.* School administrators should strengthen and protect time for LACs, transforming them into genuine PLCs focused on data-driven problem-solving and co-planning; institutionalize a structured peer coaching and mentoring program that pairs less experienced teachers with master teachers who have navigated the transition; and audit and streamline administrative tasks to reduce non-teaching burdens.

4. *Professional growth and well-being.* A continuous professional development (CPD) roadmap for Mathematics teachers should replace one-time seminars with a modular, long-term program covering pedagogical content knowledge, technology integration, and socio-emotional learning for students and teachers. Recognizing the emotional labor involved, wellness programs and psychological support services should be made accessible to teachers.

5. *Curriculum improvement.* DepEd should institutionalize a formal, systematic feedback mechanism at division and regional levels, such as annual surveys, focus group discussions with teachers, and a portal

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for submitting insights and innovations, so that the curriculum remains a living document informed by practitioners' experience.

6. *Sustainability and future research.* Future curriculum reforms should be piloted with a comprehensive support package and evaluated for effectiveness before national rollout. A longitudinal study should track the long-term impact of the MATATAG Curriculum on student achievement and teacher retention, and partnerships with Local Government Units (LGUs) and the private sector should be fostered to co-fund resource enhancement and community-based learning projects, making education a shared responsibility.

Declarations

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