



Research Article

NAVIGATING TIME CONSTRAINTS: MATHEMATICS TEACHERS' PERCEPTIONS OF THE TRIMESTER SYSTEM IN THE 2026–2027 SCHOOL YEAR

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ABSTRACT

This paper examined what math teachers think about the new 2026–2027 trimester system's timelines and how it will affect them and their students. Current literature discusses curriculum implementation, needed pacing, and student outcomes. However, it does not consider teachers' perspectives on how they understand, interpret, manage, and develop mathematics-specific strategies to meet student needs within tight timelines. This research employs a qualitative phenomenological methodology to provide a deep understanding of how teachers manage time constraints. The findings from this study reveal a time paradox: teachers want to focus on delivering content but feel that the speed at which they must deliver it limits their ability to provide conceptual depth, leading to cognitive overload, limited mastery, and less interaction. Additionally, teachers reported that this instructional pace shifted their students from deep learning to simply covering the content. To combat this time paradox, teachers use the following strategies to condense their delivery of required content: core skill prioritization, spiral reviews, technology integration, frequent assessments, etc.; however, these strategies increase their workload and emotional strain and pose a real risk to their work-life balance. Thus, while teachers can adapt their teaching to meet time constraints, their success depends on administrative support, a streamlined curriculum, and sufficient time for meaningful mathematical instruction.

Keywords: *Trimester System, Mathematics Instruction, Teacher Perception.*

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Introduction

The transition from the traditional four-quarter academic calendar to a trimester system represents a significant structural reform in education, introducing new instructional demands across subject areas. In mathematics, where learning is cumulative and conceptually interconnected, this change presents a particularly complex challenge. Mathematical understanding depends on the sequential mastery of foundational concepts, requiring sufficient instructional time for explanation, guided practice, reflection, and application (Angel et al., 2026). However, the shortened instructional periods inherent in the trimester system compel teachers to deliver extensive curriculum content within a compressed timeframe. This creates a tension between completing prescribed learning competencies and ensuring that students develop meaningful conceptual understanding. The implementation of the MATATAG Curriculum, with its rigorous competency requirements, further intensifies this challenge by requiring teachers to maintain curriculum fidelity despite limited instructional time (Angel et al., 2026).

Time constraints have emerged as one of the most persistent challenges confronting mathematics teachers under compressed academic calendars. Studies have shown that shortened instructional periods often lead to accelerated pacing, reduced opportunities for formative assessment, limited classroom interaction, and insufficient time for remediation, resulting in what researchers describe as a "mastery deficit," wherein students struggle to internalize mathematical concepts before progressing to more advanced topics (Day, 2021; McKie et al., 2025; Angel et al., 2026). These challenges are further compounded by systemic concerns, including inadequate instructional resources, limited technological support, and insufficient professional development designed to prepare teachers for accelerated instructional environments (Llanes & Santos, 2026; Malinao & Miano, 2025; Bensurto & Bernardino, 2025; Capulong et al., 2026). Consequently, mathematics teachers must continuously negotiate between institutional expectations for curriculum completion and their professional responsibility to foster deep and lasting student learning.

Beyond the structural limitations of the trimester system lies the lived experience of teachers who navigate these time pressures daily. From a phenomenological perspective, the issue extends beyond the existence of limited instructional time to how teachers perceive, interpret, and respond to these constraints in their professional practice. Compressed instructional schedules often require educators to modify lesson pacing, prioritize selected competencies, reduce opportunities for mathematical exploration, and limit individualized learner support (Banjo et al., 2025; Williams et al., 2026). Likewise, shortened teaching periods restrict opportunities for diagnostic assessment and reflective learning, making it difficult for teachers to determine whether students have progressed beyond procedural knowledge toward genuine mathematical understanding (Choppin et al., 2024). Similar findings across various educational contexts indicate that accelerated academic schedules diminish meaningful teacher–student interactions and increase instructional pressure, particularly in mathematics classrooms where conceptual development requires continuity and sustained engagement (Chirimbana et al., 2024).

Recent Philippine studies likewise reveal that mathematics teachers experience significant difficulties adapting to compressed academic schedules. Common concerns include curriculum pacing, time management, increased workload, and challenges in helping students achieve mastery under the trimester system (Ylarde & Cajandig, 2026). Teachers implementing the MATATAG Curriculum frequently report feelings of stress, exhaustion, and uncertainty as they strive to balance curriculum expectations with learners' varying academic needs (Parojenog & Miasco, 2025). In response, educators have adopted various adaptive strategies, including collaborative lesson planning, enhanced time management practices, differentiated instruction, and contextualized learning activities. Nevertheless, literature consistently identifies pacing pressure, cognitive overload, interaction deficit, and limited instructional time as recurring barriers that compromise both teaching effectiveness and student learning outcomes (Doris et al., 2025). Furthermore, repeated structural reforms in curriculum organization have been found to contribute to pedagogical inconsistency, potentially undermining the intended outcomes of educational change (Wijaya et al., 2024).

Despite the growing body of literature on trimester implementation and curriculum reform, relatively few studies have examined these issues through the lens of teachers' lived experiences. Existing research has largely emphasized program implementation, curriculum coverage, resource availability, or student achievement, while giving comparatively limited attention to how mathematics teachers personally experience, interpret, and navigate the demands of compressed instructional schedules (Chirimbana et al., 2024; Mazana et al., 2018). Moreover,

studies rarely explore how these temporal constraints influence instructional decision-making, classroom interactions, and teachers' professional judgments within the unique context of mathematics education, where conceptual continuity and progressive knowledge construction are fundamental (Williams et al., 2026; Hyde et al., 2024).

Addressing this gap, the present study adopts a phenomenological approach to explore the lived experiences of mathematics teachers implementing the trimester system during the 2026–2027 school year. Specifically, it seeks to understand how teachers perceive and make sense of time constraints, the challenges they encounter in delivering mathematics instruction, and the strategies they employ to maintain instructional quality despite the limitations imposed by a compressed academic calendar. By foregrounding teachers' voices and experiences, this study aims to contribute a deeper understanding of the realities of mathematics instruction under the trimester system and to generate insights that may inform future curriculum implementation, teacher support programs, and educational policy.

Methods

This study employed a qualitative descriptive phenomenological research design to explore mathematics teachers' perceptions of time constraints under the trimester system during the 2026–2027 school year. Purposive sampling was used to select mathematics teachers from the West II District of the Iligan City Division who had experience teaching under both the traditional four-quarter and the newly implemented trimester systems, enabling them to provide comparative insights into the instructional demands of both academic structures. Data were collected through semi-structured interviews using an interview guide adapted from related studies, focusing on instructional pacing, curriculum coverage, assessment practices, and work-life balance. Following informed consent, participants completed an initial Google Form and subsequently participated in individual online interviews lasting approximately 30–60 minutes to further elaborate on their experiences. Interview recordings were transcribed verbatim and analyzed using thematic analysis, involving data familiarization, initial coding, categorization, theme development, interpretation, validation through peer debriefing and comparison with raw data, and narrative presentation of findings. Ethical principles of voluntary participation, informed consent, confidentiality, and anonymity were strictly observed throughout the conduct of the study.

Results and Discussions

Perceptions of the New Trimester System on Lesson Delivery

The findings reveal that mathematics teachers perceive the implementation of the trimester system as both a promising educational reform and a demanding instructional transition. Participants acknowledged that the shortened academic calendar encourages more intentional lesson planning and promotes greater focus on essential learning competencies. Many teachers appreciated that the streamlined curriculum enables them to concentrate on priority concepts and organize lessons more systematically. They viewed the trimester structure as an opportunity to deliver instruction with greater purpose while addressing learners' immediate academic needs.

Despite these perceived advantages, participants consistently described the compressed instructional period as a significant challenge to effective mathematics teaching. They expressed concern that the accelerated pacing often limits opportunities for students to engage in mathematical reasoning, collaborative problem-solving, and reflective learning. Teachers explained that while curriculum coverage remains achievable, ensuring conceptual understanding becomes increasingly difficult when instructional time is constrained. Several participants emphasized that mathematics requires gradual development of ideas, repeated practice, and continuous reinforcement—conditions that are difficult to sustain within a shortened academic term.

These findings suggest that teachers continuously negotiate the balance between instructional efficiency and meaningful learning. Although the trimester system provides organizational benefits, participants questioned whether its compressed schedule allows sufficient time for learners to develop deep mathematical understanding rather than relying on procedural memorization. Similar observations were reported by Bringula et al. (2021), who found that accelerated academic schedules frequently compel teachers to prioritize curriculum completion over conceptual mastery.

The findings are further supported by Carroll's Time-on-Task Theory (1963), which argues that learning achievement is directly influenced by the amount of time students spend actively engaged in meaningful learning activities. Participants' experiences demonstrate that reduced instructional time limits opportunities for discussion, guided practice, feedback, and remediation, all of which are essential components of effective mathematics instruction. Consequently, teachers viewed instructional time not merely as a scheduling concern but as a critical determinant of students' mathematical understanding.

Instructional and Pedagogical Adjustments of Teachers

Participants described substantial modifications in their instructional practices following the implementation of the trimester system. Recognizing the limitations imposed by shorter instructional periods, teachers deliberately redesigned lesson sequences, adopted more focused instructional approaches, and prioritized essential competencies to maximize classroom time. These adjustments were intended to maintain instructional continuity while responding to the increased pacing required by the trimester calendar.

Teachers reported becoming more selective in choosing instructional activities, emphasizing those that directly contributed to students' mastery of key mathematical concepts. Collaborative lesson planning, differentiated instruction, contextualized learning activities, and targeted remediation emerged as common strategies for addressing diverse learner needs within the compressed schedule. Participants likewise highlighted the importance of careful time management, explaining that every instructional minute had become increasingly valuable.

Nevertheless, many participants acknowledged that these pedagogical adjustments often involve difficult instructional compromises. Opportunities for inquiry-based learning, extended mathematical discussions, exploratory activities, and higher-order reasoning were sometimes reduced to ensure timely completion of the prescribed curriculum. Teachers expressed concern that these necessary compromises may influence students' long-term conceptual development, particularly when teaching abstract mathematical concepts requiring repeated exposure and sustained engagement.

These findings reflect the principles of Cognitive Load Theory (Sweller, 1988), which suggests that accelerated instructional pacing may increase learners' cognitive burden and reduce opportunities for schema construction. Participants recognized that while streamlined instruction supports curriculum completion, excessive pacing may inadvertently overwhelm learners and limit meaningful knowledge acquisition. Consequently, teachers emphasized that successful implementation of the trimester system requires continuous professional development, collaborative instructional planning, and institutional support that prioritizes conceptual understanding alongside curriculum coverage.

Challenges and Opportunities of the New Trimester System

Teachers' narratives reveal that the implementation of the trimester system presents both significant challenges and valuable opportunities for professional growth. Participants consistently described increased instructional pressure resulting from compressed timelines, frequent assessment schedules, and heightened expectations for curriculum completion. These conditions often generated additional workload, emotional stress, and concerns regarding students' readiness to master increasingly complex mathematical concepts within limited instructional periods.

Despite these challenges, participants demonstrated remarkable resilience and adaptability. Rather than viewing the trimester system solely as a constraint, many teachers regarded it as an opportunity to refine their instructional practices, strengthen collaboration with colleagues, and develop more innovative approaches to mathematics instruction. Participants emphasized that the transition encouraged them to become more reflective practitioners who carefully evaluate instructional priorities and continuously adjust teaching strategies to meet learners' needs.

The findings illustrate that teachers' experiences extend beyond merely adapting to a new calendar structure. Instead, they represent an ongoing process of professional learning characterized by experimentation, reflection, and continuous improvement. Similar observations were reported by Sawah and Kusaka (2023), who found that teachers often respond to curriculum reforms through increased instructional innovation despite structural limitations.

These findings are consistent with Fullan's Educational Change Theory, which conceptualizes educational reform as a dynamic process involving uncertainty, adaptation, and gradual professional growth. Participants' experiences exemplify the "implementation dip," wherein educators initially encounter difficulties before gradually developing confidence and competence within the new system. Their experiences further highlight that successful educational reform depends not only on teachers' willingness to adapt but also on sustained institutional support, effective leadership, and adequate professional development.

Perceived Impact of the New Trimester System on Students' Learning Outcomes in Mathematics

Participants expressed differing perspectives regarding the influence of the trimester system on students' mathematical learning. While several teachers observed improvements in classroom engagement due to the more focused instructional structure, others questioned whether accelerated pacing allowed sufficient time for learners to develop deep conceptual understanding. Regardless of these differing perspectives, participants consistently agreed that mathematics instruction under the trimester system requires careful balancing between instructional efficiency and meaningful learning.

Teachers explained that the shortened academic calendar often necessitates faster transitions between topics, limiting opportunities for extensive practice, formative assessment, and individualized remediation. Consequently, students who require additional instructional support may experience greater difficulty developing foundational mathematical competencies. Participants emphasized that mathematics learning depends heavily on continuity, reinforcement, and cumulative understanding, making adequate instructional time particularly important.

To address these challenges, teachers reported implementing scaffolding techniques, spiral review, collaborative learning activities, and contextualized problem-solving tasks to maximize conceptual understanding within limited instructional time. Nevertheless, participants acknowledged that the effectiveness of these approaches depends largely on learners' prior knowledge, motivation, and readiness to engage actively in mathematics learning.

These findings align with Cognitive Load Theory and Mastery Learning Theory, both of which emphasize the importance of sufficient instructional time for knowledge construction and conceptual mastery. Participants' experiences further illustrate that effective mathematics instruction under the trimester system requires strategic instructional decision-making supported by appropriate institutional resources and flexible curriculum implementation.

Recommendations for Addressing the Challenges of the New Trimester System

Participants emphasized that successful implementation of the trimester system requires comprehensive institutional support rather than relying solely on individual teacher adaptability. They consistently recommended continuous professional development focused on curriculum pacing, assessment design, differentiated instruction, and effective time management within compressed academic schedules. Teachers believed that structured training would strengthen their instructional competence while increasing confidence in implementing the revised curriculum.

Equally important, participants highlighted the value of collaborative professional learning communities where teachers can exchange instructional resources, discuss emerging challenges, and collectively develop effective classroom strategies. They also emphasized the importance of supportive school leadership that recognizes teachers' increased workload and provides appropriate instructional resources, technical assistance, and emotional support throughout the implementation process.

These recommendations reinforce Fullan's Educational Change Theory, which emphasizes that sustainable educational reform requires continuous capacity building, collaborative cultures, and supportive leadership. Similarly, the Job Demands–Resources Model suggests that increasing organizational resources—including professional development, mentoring, and administrative support—can effectively reduce occupational stress while improving instructional performance.

Conclusions

According to the findings of this study, math educators in the new trimester education model will experience a shift in their self-perception from anxiety to a focus on being strategic in adapting to the new system. They now see themselves as curators of content to be selected and organized for students based on key objectives rather than simply delivering content. The trimester system provides the opportunity for improved focus and student engagement; however, it also creates additional pressure, with the possibility of losing some students along the way. The tension created by this system will be efficiency versus "shallow" learning. The trimester system will also encourage better teaching practices as a result of using more purposeful strategies; however, the trimester system also causes emotional and mental tax on students and teachers. There is a possibility that math education will focus on completing tasks rather than understanding them, without support such as a simplified curriculum and guidance on effectively managing time. The success of math education will depend more on how schools support math teachers with their workloads and provide the right pace for learning and well-being than on the school calendar itself.

Recommendations

Based on the findings of this study, it is recommended that the Department of Education and school administrators strengthen the implementation of the trimester system by reviewing curriculum pacing, streamlining learning competencies, and providing sustained professional development on instructional planning, differentiated instruction, formative assessment, and time management. Schools should also establish collaborative professional learning communities and provide adequate instructional resources, mentoring, and administrative support to help mathematics teachers effectively manage the demands of compressed academic schedules while safeguarding their well-being. Mathematics teachers are encouraged to continue employing learner-centered and evidence-based instructional strategies, such as scaffolding, spiral review, collaborative problem-solving, and reflective teaching practices, to promote conceptual understanding despite limited instructional time. Finally, future researchers are encouraged to conduct longitudinal and mixed-methods studies across different educational contexts and subject areas to further examine the long-term effects of the trimester system on teacher practices, student learning outcomes, curriculum implementation, and educational quality, thereby providing stronger empirical evidence to inform future policy decisions and instructional reforms.

Conflict of Interests

The author declares that they have no conflicts of interest

References

- [1] Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- [2] Fullan, M. (2007). *The new meaning of educational change* (4th ed.). Teachers College Press.
- [3] Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- [4] Ryan, R. M., & Deci, E. L. (2020). *Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions*. **Contemporary Educational Psychology**, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- [5] Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. *Social Psychology of Education*, 21(5), 1251–1275. <https://doi.org/10.1007/s11218-018-9464-8>
- [6] Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80–91. <https://doi.org/10.1016/j.tate.2007.01.004>
- [7] Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- [8] Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional development in the United States. *Psychology, Society, & Education*, 7(3), 252–263. <https://doi.org/10.25115/psyse.v7i3.515>