

Challenges, Opportunities, and Teaching Efficacy of Mathematics Teachers in the Implementation of the Matatag Curriculum

Fatima Calinog Nosce

Laguna State Polytechnic University Sta. Cruz Laguna 4009 PHILIPPINES

Email address: julierosemendoza002@gmail.com

Abstract— *The main purpose of the study is to analyze the implementation of the MATATAG Curriculum, its challenges, opportunities, and their relationship to the teaching efficacy of mathematics educators. The study aims to determine the level of challenges, opportunities, and teaching efficacy of mathematics teachers in the implementation of the MATATAG curriculum. The study also analyzes how perceived challenges and opportunities show significant relationships with the teaching efficacy of mathematics teachers. The study employs a descriptive-correlational research design and collects data from 102 mathematics teachers in the districts of San Francisco I, San Francisco II, and San Andres through total enumeration sampling, using a self-made questionnaire. Descriptive and inferential statistical tools, including mean, standard deviation, and Pearson product-moment correlation coefficient, were utilized for data analysis. The study found moderate challenges in teacher readiness and institutional support, and high challenges in resource availability, time constraints, and monitoring and feedback. Mathematics teachers reported very high levels of opportunity in foundational skills, flexible learning pathways, professional growth, and collaboration and networking, while also demonstrating a high level of cultural relevance and identity. Additionally, they exhibited very high levels of teaching efficacy. There is a significant relationship between certain challenges, such as teacher readiness, resource availability, and time constraints, and indicators of teaching efficacy, leading to a partial rejection of the null hypothesis. These challenges were found to negatively influence teaching efficacy, particularly instructional strategies and classroom management, while monitoring and feedback foster innovation. Institutional support, however, did not show a significant relationship with teaching efficacy. On the other hand, a significant relationship was established between the opportunities encountered by mathematics teachers and teaching efficacy, resulting in the rejection of the null hypothesis. This means that opportunities significantly enhance the teaching efficacy of mathematics teachers. Based on the findings, it is recommended that DepEd implement intensive training on instructional preparedness, classroom management, and assessment strategies, collaborate with schools to provide teaching materials and ICT tools, establish structured peer coaching, professional learning communities, and evaluation systems for continuous professional development.*

Keywords— *Challenges, opportunities, teaching efficacy, curriculum implementation, mathematics.*

I. INTRODUCTION

The implementation of new educational curricula worldwide aims to enhance student learning by fostering critical thinking, problem-solving, and adaptability. Countries such as South Korea and Singapore have successfully reformed their

education systems by providing strong institutional support, adequate resources, and continuous teacher training (Suprpto et al., 2021). In the Philippines, the MATATAG Curriculum was introduced to strengthen mathematics education by improving numeracy skills and promoting critical thinking. However, its implementation faces significant challenges in underfunded districts, primarily due to inadequate teacher preparedness, limited resources, insufficient institutional support, time constraints, and limited support and feedback (Kilag et al., 2024; Saro et al., 2024; Garma, 2024). Despite these, the curriculum presents opportunities for professional growth, collaboration, and enhanced student engagement. When effectively implemented, it has the potential to reinforce foundational skills, promote cultural relevance, and introduce innovative teaching strategies (Loza, 2024).

Teaching efficacy, teachers' confidence in their ability to effectively implement the MATATAG Curriculum and facilitate student learning, is critical in ensuring successful curriculum implementation. However, without adequate resources and institutional support, these potential benefits may not be fully realized (Loza, 2024).

There is a clear connection between these variables. When institutional support, training, and adequate resources are provided, teachers are more likely to adapt successfully to curriculum changes, feel empowered in their roles, and engage students effectively. However, according to Garma (2024), the challenges teachers face during curriculum implementation can hinder their ability to deliver quality instruction. Many teachers feel overwhelmed by administrative tasks and the demands of preparing new materials, which distract from their teaching focus. Systematic monitoring and evaluation are crucial to assess the curriculum's effectiveness and ensure educators receive the necessary support (Loza, 2024).

This study explores the challenges, opportunities, and teaching efficacy of mathematics teachers in the implementation of the MATATAG Curriculum, shedding light on recommendations to support its successful implementation.

1.1 Statement of the Problem

Problem/s which were addressed by the research

This study aimed to determine the challenges, opportunities, and teaching efficacy of mathematics teachers in the implementation of the MATATAG Curriculum.

Specifically, it sought to answer the following research questions:

1. What is the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of:
 - 1.1. Teachers' Readiness;
 - 1.2. Resource Availability;
 - 1.3. Institutional Support;
 - 1.4. Time Constraints; and
 - 1.5. Monitoring and Feedback?
2. What is the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of:
 - 2.1. Foundational Skills;
 - 2.2. Cultural Relevance and Identity;
 - 2.3. Flexible Learning Pathways;
 - 2.4. Professional Growth; and
 - 2.5. Collaboration and Networking?
3. What is the level of teaching efficacy of mathematics teachers in terms of:
 - 3.1. Content Mastery;
 - 3.2. Resilience;
 - 3.3. Innovation;
 - 3.4. Instructional Strategies; and
 - 3.5. Classroom Management?
4. Is there a significant relationship between the challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum and their teaching efficacy?
5. Is there a significant relationship between the opportunities encountered by mathematics teachers in the implementation of the MATATAG Curriculum and their teaching efficacy?

II. METHODOLOGY

The study employs a descriptive-correlational research design and collects data from 102 mathematics teachers in the districts of San Francisco I, San Francisco II, and San Andres through total enumeration sampling, using a self-made questionnaire. Descriptive and inferential statistical tools, including mean, standard deviation, and Pearson product-moment correlation coefficient, were utilized for data analysis.

III. RESULTS AND DISCUSSION

This part deals with the presentation, analysis, and interpretation of the data gathered from the respondents.

Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum.

In this study, the major findings for the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of teachers' readiness, resource availability, institutional support, time constraints, and monitoring and feedback are shown below.

The following tables show statements, means, weighted means, standard deviations, corresponding remarks, and verbal interpretations.

Table 1 presents the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of teachers' readiness.

Among the indicators, the statement “develop and integrate innovative instructional strategies and educational technologies to enhance student engagement and learning outcomes” obtained the highest mean ($M = 3.52$, $SD = 1.00$), indicating that teachers agree they face challenges in this area. This suggests a relatively greater difficulty in incorporating innovation and technology into their teaching practices.

On the other hand, the statement “reflect on their readiness by analyzing how their instructional practices impact curriculum implementation” received the lowest mean ($M = 2.98$, $SD = 0.99$), with a remark “Somewhat Agree”. This implies that there is a need for greater emphasis on reflective practice on teachers' readiness so that teachers can manage how their instructional practices improve curriculum implementation.

TABLE 1. Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Teachers' Readiness

The teachers...	MEAN	SD	REMARKS
...enhance their understanding of the MATATAG Curriculum through continuous training and seminars, ensuring alignment with its goals, objectives, and implementation strategies.	3.32	0.90	Somewhat Agree
...apply effective instructional approaches to deliver curriculum content in ways that support student learning.	3.37	1.06	Somewhat Agree
...assess their level of preparedness by evaluating their mastery of instructional content, strategies, and assessment tools in alignment with the curriculum.	3.27	1.02	Somewhat Agree
...reflect on their readiness by analyzing how their instructional practices impact curriculum implementation.	2.98	0.99	Somewhat Agree
...develop and integrate innovative instructional strategies and educational technologies to enhance student engagement and learning outcomes.	3.52	1.00	Agree
Weighted Mean		3.29	
SD		1.00	
Verbal Interpretation			Moderate Challenge

The computed weighted mean of 3.29, with a standard deviation of 1.00, shows that mathematics teachers experience a moderate level of challenge in terms of their readiness for implementing the MATATAG Curriculum. This indicates that while they do not encounter extreme difficulties, they still have some challenges that may impact their effectiveness in curriculum delivery.

This implies that while teachers demonstrate efforts in aligning with the MATATAG Curriculum, further support in instructional preparedness, self-reflection, and assessment strategies may be necessary to strengthen their readiness and effectiveness in delivering the curriculum.

The results align with the findings of Gutierrez (2024), who identified teacher preparedness as the main challenge in implementing the MATATAG Curriculum. Moreover, Saro et al. (2024) found that inadequate training can lead to challenges in implementing curriculum changes.

Table 2 presents the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of resource availability.

TABLE 2. Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Resource Availability

The department or resource providers...	MEAN	SD	REMARKS
...ensure that teachers have access to essential teaching materials, including textbooks, modules, and reference materials, to support effective instruction.	3.34	1.01	Somewhat Agree
...optimize the use of available ICT tools, such as projectors and digital resources, to enhance classroom learning experiences.	3.14	0.84	Somewhat Agree
...evaluate the availability and effectiveness of community and external support to strengthen curriculum implementation.	3.65	1.10	Agree
...asses the adequacy of instructional guides, such as manuals and expert consultations, in enhancing teaching strategies.	3.43	1.01	Agree
...develop innovative solutions to enhance resource allocation, ensuring sufficient materials and equipment for interactive and engaging learning.	3.57	1.04	Agree
Weighted Mean	3.44		
SD	1.00		
Verbal Interpretation	High Challenge		

The highest mean is observed in the statement “evaluate the availability and effectiveness of community and external support to strengthen curriculum implementation” (M = 3.65, SD = 1.10), with the remark “Agree”. This indicates teachers face considerable difficulties in obtaining and using support from external sources like community partners or local stakeholders.

Conversely, the lowest mean is found in the statement “optimize the use of available ICT tools, such as projectors and digital resources, to enhance classroom learning experiences” (M = 3.14, SD = 0.84), with the remark “Somewhat Agree”. This suggests that while challenges still exist in effectively integrating ICT tools, teachers may find this aspect comparatively more manageable than other areas of resource availability.

The computed weighted mean of 3.44, with a standard deviation of 1.00, shows that mathematics teachers experience a high challenge in terms of resource availability. This indicates that they face some challenges in accessing essential teaching materials, optimizing ICT tools, and ensuring adequate instructional resources.

Overall, this suggests that additional support in the form of instructional materials, improved ICT integration, and increased external resource allocation may be required to improve their effectiveness in delivering the curriculum.

The results on resource availability align with Saro et al. (2024), who found that resource constraints and a lack of support have hindered the effective implementation of the MATATAG Curriculum. Likewise, Padillo et al. (2021) highlighted the need for sufficient training, resources, and professional development to help teachers effectively adapt to curriculum changes.

Table 3 presents the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of institutional support.

TABLE 3. Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Institutional Support

The institution...	MEAN	SD	REMARKS
...supports the implementation of the MATATAG Curriculum by providing clear guidance and necessary assistance.	3.07	0.97	Somewhat Agree
...establishes regular meetings and open communication channels to address curriculum-related challenges efficiently.	3.47	1.00	Agree
...evaluates the availability of resources and opportunities for collaborative planning to enhance teacher coordination.	3.44	1.14	Agree
...reviews and improves policies and technical assistance continuously to ensure a well-guided curriculum implementation.	3.40	0.98	Somewhat Agree
...develops recognition programs, incentives, and professional networks to foster continuous teacher growth and development.	3.38	1.02	Somewhat Agree
Weighted Mean	3.35		
SD	1.02		
Verbal Interpretation	Moderate Challenge		

The highest mean is observed in the statement “establishes regular meetings and open communication channels to address curriculum-related challenges efficiently” (M = 3.47, SD = 1.00), with the remark “Agree”. This indicates that teachers consider effective communication and regular collaboration as areas where institutional support is relatively strong, though still presenting some degree of challenge.

On the other hand, the lowest mean is reported for the statement “supports the implementation of the MATATAG Curriculum by providing clear guidance and necessary assistance” (M = 3.07, SD = 0.97), with the remark “Somewhat Agree”. This suggests that some teachers feel a lack of consistent or sufficient guidance from the institution during the implementation process.

The computed weighted mean of 3.35, with a standard deviation of 1.02, shows that mathematics teachers experience a moderate challenge in terms of institutional support. This indicates that while they receive some assistance, they still face challenges related to clear guidance, continuous policy improvements, and recognition programs that may impact their effectiveness in curriculum implementation.

Overall, this implies that while institutions provide some level of support, further efforts in strengthening communication, collaborative planning, and professional development opportunities may be necessary to ensure a more effective implementation of the curriculum.

The results align with the findings of Saro et al. (2024) in the study which explores the perceived impact of the MATATAG Curriculum on basic education teaching for the school year 2024-2025, focusing on teacher perspectives, challenges, and the curriculum's effectiveness in enhancing educational outcomes, that adequate resources and institutional support are important for the MATATAG Curriculum's successful implementation. Moreover, Roos and

Borkoski (2021) highlight the importance of creating supportive school cultures that prioritize teacher well-being and professional growth.

The degree of difficulties experienced by mathematics teachers in terms of time limitations during the implementation of the MATATAG Curriculum is shown in Table 4.

TABLE 4. Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Time Constraints

The curriculum...	MEAN	SD	REMARKS
...acknowledges the need for sufficient time for teachers to prepare lessons and instructional materials effectively.	3.46	0.99	Agree
...structures content delivery ensuring efficient coverage within the school year.	3.33	0.95	Somewhat Agree
...evaluates the balance between instructional and administrative tasks to support effective teaching.	3.55	1.01	Agree
...assesses the feasibility of providing individualized student support and lesson adaptation within time constraints.	3.59	0.85	Agree
...incorporates flexible scheduling strategies to enhance teaching effectiveness and ensure curriculum completion.	3.51	1.11	Agree
Weighted Mean		3.49	
SD		0.98	
Verbal Interpretation		High Challenge	

The highest mean is obtained by the statement “assesses the feasibility of providing individualized student support and lesson adaptation within time constraints” (M = 3.59, SD = 0.85), with the remark “Agree”. This indicates that limited time makes personalized instruction difficult, highlighting a key concern.

The lowest mean is found in the statement “structures content delivery ensuring efficient coverage within the school year” (M = 3.33, SD = 0.95), with the remark “Somewhat Agree”. This suggests that content delivery is a challenge, but it is less problematic compared to other time-related issues.

The computed weighted mean of 3.49, with a standard deviation of 0.98, shows that mathematics teachers experience high challenge in terms of time constraints. This indicates that they encounter some difficulties in balancing lesson preparation, instructional delivery, and administrative tasks effectively.

Overall, this implies that further support in scheduling, balancing workloads, and ensuring sufficient preparation time may be necessary to enhance their teaching efficiency and effectiveness in delivering the curriculum.

According to Gutierrez (2024), teachers are constrained by time, which prevents them from adequately addressing all topics. Moreover, Cruz et al. (2025) found that time constraints cause significant stress for teachers.

Table 5 presents the level of challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum in terms of monitoring and feedback.

The highest mean is observed in the statement “establishes clear and structured mechanisms for monitoring student progress under the MATATAG Curriculum” (M = 3.56, SD = 1.04), with the remark “Agree”. This indicates that teachers

find the implementation of systematic monitoring processes particularly challenging, suggesting a need for clearer frameworks and consistent support in tracking student progress.

TABLE 5. Level of Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Monitoring and Feedback

The department or institution...	MEAN	SD	REMARKS
...recognizes the importance of providing sufficient feedback to improve the implementation of the MATATAG Curriculum.	3.39	1.27	Somewhat Agree
...establishes clear and structured mechanisms for monitoring student progress under the MATATAG Curriculum.	3.56	1.04	Agree
...promotes opportunities for peer observation and constructive feedback to support professional growth.	3.42	1.02	Agree
...reviews and enhances monitoring systems to enhance teaching strategies and instructional effectiveness.	3.39	0.95	Somewhat Agree
...implements structured and supportive evaluation processes to ensure teachers feel guided rather than overwhelmed.	3.45	0.94	Agree
Weighted Mean		3.44	
SD		1.04	
Verbal Interpretation		High Challenge	

In contrast, the lowest mean are tied between the statements “recognizes the importance of providing sufficient feedback to improve the implementation of the MATATAG Curriculum” and “reviews and enhances monitoring systems to enhance teaching strategies and instructional effectiveness” (both M = 3.39, SD = 1.27 and 0.95, respectively), with the remark “Somewhat Agree”. These results suggest that while feedback and system review are valued, they may not be as consistently or effectively implemented, posing a moderate challenge to teachers.

The computed weighted mean of 3.44, with a standard deviation of 1.04, shows that mathematics teachers experience high challenge in terms of monitoring and feedback. This indicates that while there are existing mechanisms for evaluation and feedback, some areas, such as structured monitoring systems and professional growth opportunities, still require improvement to enhance curriculum implementation.

Overall, this implies that further improvements in monitoring strategies, peer collaboration, and structured evaluation processes may be necessary to strengthen instructional effectiveness and curriculum delivery.

The findings regarding monitoring and feedback are consistent with study by Guiaselon et al. (2022) who highlighted that overcrowded classrooms and curriculum overload hinder effective monitoring and feedback. These issues reduce individualized attention and depth of learning, stressing the need for stronger feedback systems and improved monitoring to support successful curriculum implementation.

Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum

In this study, the major findings for the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of foundational skills, cultural relevance and identity, flexible learning pathways, professional growth, and collaboration and networking are shown below.

Statements, means, weighted means, standard deviations, related comments, and verbal explanations are displayed in the tables below.

Table 6 presents the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of foundational skills.

The highest mean is observed in the statement “emphasizes the development of students’ foundational mathematics skills” (M = 4.39, SD = 0.98), with the remark “Strongly Agree”. This indicates that teachers perceive a significant opportunity in the curriculum’s strong emphasis on foundational skills, suggesting alignment with core educational goals in early math learning.

Conversely, the lowest mean is reported for the statement “provides structured and varied opportunities for students to practice and reinforce basic mathematical concepts” (M = 4.06, SD = 0.89), with the remark “Agree”. This suggests that although opportunities for practice are present, there is room to further enhance instructional strategies for reinforcing foundational skills.

TABLE 6. Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Foundational Skills

The MATATAG Curriculum...	MEAN	SD	REMARKS
...emphasizes the development of students' foundational mathematics skills.	4.39	0.98	Strongly Agree
...provides structured and varied opportunities for students to practice and reinforce basic mathematical concepts.	4.06	0.89	Agree
...follows a clear progression that supports skill mastery and conceptual understanding.	4.17	0.93	Agree
...incorporates collaborative learning strategies that help educators assess and enhance students' foundational skills.	4.25	0.71	Strongly Agree
...lays the groundwork for students to build upon foundational skills, preparing them for more advanced mathematical concepts.	4.21	0.94	Strongly Agree
Weighted Mean		4.22	
SD		0.89	
Verbal Interpretation		Very High	

The computed weighted mean of 4.22, with a standard deviation of 0.89, shows that the MATATAG Curriculum provides a very high level of opportunity in strengthening students' foundational mathematical skills. This indicates that the curriculum effectively supports skill mastery, conceptual understanding, and structured reinforcement of basic mathematical concepts.

Overall, this implies that even though the curriculum effectively fosters foundational learning, it may be even more successful in preparing students for more complex mathematical concepts if instructional strategies, collaborative learning approaches, and organized practice opportunities are improved.

The findings of the study support the research by Dayola et al. (2024), who note that the MATATAG Curriculum strengthens foundational skills, preparing students for future challenges. This implies that the MATATAG Curriculum effectively supports the development of essential skills, particularly in mathematics, ensuring that students are well-prepared for more advanced learning.

Table 7 presents the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of cultural relevance and identity.

TABLE 7. Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Cultural Relevance and Identity

The MATATAG Curriculum...	MEAN	SD	REMARKS
...incorporates students' cultural backgrounds and real-life contexts to enhance learning.	4.26	0.72	Strongly Agree
...encourages meaningful discussions about cultural identity in mathematics through meaningful classroom interactions.	4.20	0.94	Agree
...integrates inclusive materials that represent diverse perspectives to support equitable learning.	3.98	0.91	Agree
...emphasizes cultural relevance strengthens student engagement, and promotes deeper learning experiences.	3.96	0.90	Agree
...fosters respect for cultural diversity by incorporating mathematical applications that reflect various cultural contexts.	4.29	0.80	Strongly Agree
Weighted Mean		4.14	
SD		0.86	
Verbal Interpretation		High	

The highest mean is found in the statement “fosters respect for cultural diversity by incorporating mathematical applications that reflect various cultural contexts” (M = 4.29, SD = 0.80), with the remark “Strongly Agree”. This suggests that teachers recognize a strong opportunity within the curriculum to promote inclusivity and respect for diversity through culturally responsive mathematical content.

In contrast, the lowest mean is reported for the statement “emphasizes cultural relevance strengthens student engagement, and promotes deeper learning experiences” (M = 3.96, SD = 0.90), with the remark “Agree”. While still positive, this indicates that although the curriculum supports culturally relevant learning, there is room to further enhance its impact on student engagement and depth of understanding.

The computed weighted mean of 4.14, with a standard deviation of 0.86, shows that the MATATAG Curriculum provides a high level of opportunity in promoting cultural relevance and identity. This indicates that the curriculum effectively integrates students' diverse cultural backgrounds, fosters meaningful discussions on cultural identity, and thoughtfully incorporates inclusive, relevant materials that support equitable learning.

Overall, this implies that while the curriculum successfully enhances cultural relevance and student engagement, further efforts in diversifying instructional materials, strengthening cultural discussions, and integrating real-life applications may further enrich students' learning experiences.

The findings of the study align with the research conducted by Owens et al. (2024) that cultural misunderstandings and biases can impact expectations and interactions with students. Additionally, Darling-Hammond et al. (2017) found that culturally responsive teaching strategies help bridge gaps in learning, improving both student participation and achievement.

Table 8 presents the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of flexible learning pathways.

TABLE 8. Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Flexible Learning Pathways

The MATATAG Curriculum...	MEAN	SD	REMARKS
...recognizes and accommodates different learning styles among students.	4.21	0.69	Strongly Agree
...allows teachers to modify lessons to effectively meet the diverse needs of their students.	4.35	0.61	Strongly Agree
...enhances overall student learning by integrating flexible pathways that promote meaningful and adaptive learning experiences.	4.25	0.71	Strongly Agree
...utilizes varied assessment methods to address various learning preferences and measure student progress effectively.	4.13	0.66	Agree
...provides multiple opportunities for students to explore and engage with mathematical concepts.	4.09	0.72	Agree
Weighted Mean	4.21		
SD	0.68		
Verbal Interpretation	Very High		

The highest mean is observed in the statement “allows teachers to modify lessons to effectively meet the diverse needs of their students” (M = 4.35, SD = 0.61), with the remark “Strongly Agree”. This indicates that teachers see a significant opportunity in the curriculum's adaptability, enabling them to tailor instruction to accommodate diverse learning needs.

On the other hand, the lowest mean is obtained by the statement “provides multiple opportunities for students to explore and engage with mathematical concepts” (M = 4.09, SD = 0.72), with the remark “Agree”. While still indicating a positive perception, this slightly lower mean suggests that there may be potential to further enrich the variety or depth of exploratory opportunities in the mathematics curriculum.

The computed weighted mean of 4.21, with a standard deviation of 0.68, shows that the MATATAG Curriculum provides a very high level of opportunity in supporting flexible learning pathways. This indicates that the curriculum effectively accommodates diverse learning styles, allows for lesson modifications, and integrates adaptive learning experiences.

Overall, this implies that while the curriculum successfully promotes flexible and inclusive learning, further refinements in differentiated instruction, adaptive assessment strategies, and student-centered learning approaches may further enhance its effectiveness in catering to diverse learner needs.

The study's findings conform with Kariippanon et al. (2019) that flexible learning spaces, combined with student-centered teaching, promote greater interaction, collaboration, and engagement. Bolton et al. (2020) also noted that flexible learning pathways offer various routes for acquiring knowledge and skills, addressing the diverse needs and situations of learners.

Table 9 presents the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of professional growth.

The highest mean is recorded for the statement “provides training opportunities that enhance teachers’ ability to implement it effectively” (M = 4.55, SD = 0.68), with the remark “Strongly Agree”. This indicates that teachers highly value the professional development opportunities associated with the curriculum, particularly in terms of practical training that supports effective implementation.

TABLE 9. Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Professional Growth

The MATATAG Curriculum...	MEAN	SD	REMARKS
...emphasizes the importance of continuous professional development for educators.	4.38	0.68	Strongly Agree
...provides training opportunities that enhance teachers' ability to implement it effectively.	4.55	0.68	Strongly Agree
...encourages educators to reflect on and improve their teaching practices through ongoing learning.	4.30	0.69	Strongly Agree
...allows teachers to assess and refine their skills as mathematics educators.	4.16	0.61	Agree
...fosters a culture of professional growth by promoting workshops, collaboration, and innovative teaching strategies.	4.23	0.63	Strongly Agree
Weighted Mean	4.32		
SD	0.66		
Verbal Interpretation	Very High		

On the other hand, the lowest mean is noted for the statement “allows teachers to assess and refine their skills as mathematics educators” (M = 4.16, SD = 0.61), with the remark “Agree”. While still reflecting a positive perception, this suggests that some teachers may see slightly fewer opportunities for self-assessment and individual skill refinement compared to other aspects of professional development.

The computed weighted mean of 4.32, with a standard deviation of 0.66, shows that the MATATAG Curriculum provides a very high level of opportunity in supporting professional growth. This indicates that the curriculum strongly promotes continuous professional development, encourages reflective teaching practices, and fosters collaboration among educators.

This implies that while the curriculum effectively enhances teachers’ professional skills and instructional strategies, further initiatives such as mentoring programs, specialized training, and research-based professional development may further strengthen educators’ expertise and growth.

The findings of the study are aligned with the research of Darling-Hammond et al. (2017), that sustained, collaborative,

and content-focused professional development is important in improving teaching practices and student outcomes. Similarly, ongoing professional development fosters teacher efficacy, allowing educators to make data-driven decisions and adjust their teaching practices to better meet the needs of their students (Kraft et al., 2018).

Table 10 presents the level of opportunities encountered by mathematics teachers in the implementation of the MATATAG curriculum in terms of collaboration and networking.

The highest mean is recorded for the statement “expands networking opportunities with educators from other schools and districts” (M = 4.46, SD = 0.73), with the remark “Strongly Agree”. This suggests that teachers highly appreciate the curriculum’s support in fostering broader professional networks beyond their own institutions, which can lead to richer collaboration and the exchange of best practices.

The lowest mean is reported for the statement “facilitates regular discussions where educators share best practices and address implementation challenges” (M = 4.09, SD = 0.69), with the remark “Agree”. While still positive, this may indicate that although opportunities for collaborative discussions exist, there is room for improvement in making such interactions more effective.

TABLE 10. Level of Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum in terms of Collaboration and Networking

The MATATAG Curriculum...	MEAN	SD	REMARKS
...fosters collaboration among mathematics teachers to enhance professional growth.	4.27	0.71	Strongly Agree
...facilitates regular discussions where educators share best practices and address implementation challenges.	4.09	0.69	Agree
...promotes a community of practice that encourages teachers to exchange ideas and resources.	4.23	0.79	Strongly Agree
...expands networking opportunities with educators from other schools and districts.	4.46	0.73	Strongly Agree
...strengthens collaboration by supporting innovative approaches that improve teachers' understanding and instructional effectiveness.	4.36	0.67	Strongly Agree
Weighted Mean		4.28	
SD		0.72	
Verbal Interpretation		Very High	

The computed weighted mean of 4.28, with a standard deviation of 0.72, shows that the MATATAG Curriculum provides a very high level of opportunity for fostering collaboration and networking among educators. This indicates that the curriculum strongly encourages professional interactions, sharing of best practices, and expanding teacher networks across schools and districts.

Overall, this implies that while the curriculum effectively promotes a collaborative teaching environment, further strengthening professional learning communities, interdisciplinary collaborations, and mentorship programs may enhance educators' engagement and instructional effectiveness even further.

The findings of the study corroborate the research by Darling-Hammond et al. (2017) that professional collaboration and networking opportunities improve teacher efficacy, resulting in better outcomes for students. Additionally, Gqwabaza and Thabisa (2024) emphasize the role of digital collaboration in fostering professional networks, which resonates with the MATATAG Curriculum’s strong focus on promoting collaborative environments and the sharing of best practices among educators.

Level of Teaching Efficacy of Mathematics Teachers

In this study, the major findings for the level of teaching efficacy of mathematics teachers in terms of content mastery, resilience, innovation, instructional strategies, and classroom management are shown below.

The following tables show statements, means, weighted means, standard deviations, corresponding remarks, and verbal interpretations.

Table 11 presents the level of teaching efficacy of mathematics teachers in terms of content mastery.

The highest mean is found in the statement “integrate innovative approaches to teaching mathematics, ensuring effective and engaging learning experiences” (M = 4.41, SD = 0.69), with the remark “Strongly Agree”. This indicates that teachers feel highly confident in their ability to use creative and engaging strategies to deliver mathematics instruction, reflecting a strong sense of instructional efficacy.

The lowest means are shared by two statements: “deliver mathematical concepts and identify students' misconceptions to address them appropriately” and “establish meaningful connections between mathematical concepts and real-world applications to enhance student learning” (both M = 4.26, SD = 0.89), with the remark “Strongly Agree”. While these scores are still very high, they suggest that addressing student misconceptions and connecting concepts to real-world applications, though recognized strengths, may present slightly more challenges than other areas of content mastery.

TABLE 11. Level of Teaching Efficacy of Mathematics Teachers in terms of Content Mastery

The teachers...	MEAN	SD	REMARKS
...demonstrate a strong understanding of the mathematics concepts required in the MATATAG Curriculum.	4.32	0.90	Strongly Agree
...deliver mathematical concepts and identify students' misconceptions to address them appropriately.	4.26	0.89	Strongly Agree
...establish meaningful connections between mathematical concepts and real-world applications to enhance student learning.	4.26	0.89	Strongly Agree
...assess and refine their mathematical knowledge and teaching strategies to improve instruction.	4.34	0.92	Strongly Agree
...integrate innovative approaches to teaching mathematics, ensuring effective and engaging learning experiences.	4.41	0.69	Strongly Agree
Weighted Mean		4.32	
SD		0.86	
Verbal Interpretation		Very High	

The computed weighted mean of 4.32, with a standard deviation of 0.86, indicates that mathematics teachers exhibit a

very high level of efficacy in content mastery. This suggests that they possess a strong understanding of mathematical concepts, effectively deliver lessons, and apply innovative approaches to enhance student learning.

Overall, this implies that while teachers demonstrate confidence and competence in their subject matter, continuous professional development, advanced instructional strategies, and further integration of real-world applications may further strengthen their effectiveness in delivering mathematics instruction.

The findings are aligned with Darling-Hammond et al. (2017), who emphasize that strong content knowledge enhances teaching efficacy by enabling teachers to address student questions and adapt instruction. However, Holvio (2022) presents a different perspective, arguing that the impact of teacher knowledge on student outcomes varies significantly depending on factors such as the student's first language, the school's urban or rural location, and the alignment of students' and teachers' knowledge.

Table 12 presents the level of teaching efficacy of mathematics teachers in terms of resilience.

TABLE 12. Level of Teaching Efficacy of Mathematics Teachers in terms of Resilience

The teachers...	MEAN	SD	REMARKS
...maintain a positive attitude and stay motivated despite challenges in implementing the MATATAG Curriculum.	4.61	0.49	Strongly Agree
...adapt quickly to unexpected changes and remain flexible in their teaching approaches.	4.54	0.54	Strongly Agree
...develop strategies to overcome instructional challenges and enhance student understanding.	4.39	0.53	Strongly Agree
...manage stress effectively and persist through difficulties while implementing new teaching strategies.	4.47	0.52	Strongly Agree
...integrate feedback into their practices, continuously improving their instructional methods.	4.48	0.54	Strongly Agree
Weighted Mean	4.50		
SD	0.52		
Verbal Interpretation	Very High		

The highest mean is recorded for the statement “maintain a positive attitude and stay motivated despite challenges in implementing the MATATAG Curriculum” (M = 4.61, SD = 0.49), with the remark “Strongly Agree”. This indicates that teachers exhibit exceptional resilience by maintaining a positive and motivated outlook despite challenges, highlighting a key strength in their ability to persist through difficulties.

The lowest mean is noted for the statement “develop strategies to overcome instructional challenges and enhance student understanding” (M = 4.39, SD = 0.53), with the remark “Strongly Agree”. While this score is still very high, it suggests that although teachers are generally successful in overcoming instructional challenges, they may face slightly more difficulty in devising strategies that consistently enhance student understanding compared to other aspects of resilience.

The computed weighted mean of 4.50, with a standard deviation of 0.64, indicates a very high level of resilience

among mathematics teachers. This suggests that they effectively implement diverse teaching strategies, adjust instructional methods to meet student needs, and utilize innovative approaches to enhance learning under the MATATAG Curriculum.

Overall, this implies that teachers are highly competent in designing and delivering effective lessons, ensuring student engagement and comprehension. Providing ongoing training, collaborative teaching opportunities, and access to updated instructional resources can further strengthen their instructional efficacy.

The findings align with Flores (2018), who stresses the importance of resilience in teaching effectiveness. Moreover, Barlow et al. (2023) emphasized the importance of fostering resilience in educational settings, stating that resilient teachers are better able to deal with classroom challenges and maintain effective teaching practices.

Table 13 presents the level of teaching efficacy of mathematics teachers in terms of innovation.

TABLE 13. Level of Teaching Efficacy of Mathematics Teachers in terms of Innovation

The teachers...	MEAN	SD	REMARKS
...recognize the value of exploring innovative teaching methods in mathematics through the MATATAG Curriculum.	4.39	0.60	Strongly Agree
...integrate technology and interactive, student-centered activities to enhance learning experiences.	4.15	0.60	Agree
...design creative lesson plans and assessment methods to effectively engage students.	4.16	0.84	Agree
...utilize innovative tools and differentiated strategies confidently.	4.39	0.60	Strongly Agree
...experiment with new teaching practices and cross-disciplinary concepts to enhance student learning.	4.28	0.57	Strongly Agree
Weighted Mean	4.27		
SD	0.64		
Verbal Interpretation	Very High		

The highest means are observed in the statements “recognize the value of exploring innovative teaching methods in mathematics through the MATATAG Curriculum” and “utilize innovative tools and differentiated strategies confidently” (both M = 4.39, SD = 0.60), with the remark “Strongly Agree”. This indicates that teachers strongly value innovation in their teaching and feel confident in using innovative tools and strategies to enhance learning.

The lowest mean is reported for the statement “integrate technology and interactive, student-centered activities to enhance learning experiences” (M = 4.15, SD = 0.60), with the remark “Agree”. While this score remains high, it suggests that while technology and student-centered activities are integrated, there may be room for further expansion or refinement in this area to fully optimize learning experiences.

The computed weighted mean of 4.27, with a standard deviation of 0.64, indicates that mathematics teachers possess a very high level of teaching efficacy in terms of innovation. This suggests that teachers strongly recognize the value of exploring innovative teaching methods, integrating

technology, and using creative and student-centered activities as part of their teaching practices under the MATATAG Curriculum.

The responses highlight that teachers confidently utilize innovative tools and strategies, experiment with new teaching practices, and design engaging lesson plans and assessments to enhance student learning. These findings imply that the teachers are not only receptive to modern teaching approaches but also actively seek ways to implement them for improved educational outcomes.

Oginni (2016), who discovered that a student's academic achievement in mathematics is influenced by mathematical innovation, location, gender, and technology, is in line with the results. Similarly, Budhi Santosa et al. (2024) found that teachers with high levels of self-regulated learning and internet self-efficacy are more likely to use innovative teaching methods that align with the constructivist curriculum. The study discovered that self-regulated learning had a significant impact on teaching innovation when teachers had a high internet self-efficacy.

Table 14 presents the level of teaching efficacy of mathematics teachers in terms of instructional strategies.

TABLE 14. Level of Teaching Efficacy of Mathematics Teachers in terms of Instructional Strategies

The teachers...	MEAN	SD	REMARKS
...recognize the importance of using a variety of instructional strategies to meet diverse student needs.	4.45	0.50	Strongly Agree
...implement differentiated instruction and inquiry-based learning approaches to enhance student engagement.	4.39	0.55	Strongly Agree
...use scaffolding techniques and instructional materials to support different learning paces and maximize student success.	4.23	0.69	Strongly Agree
...assess student understanding regularly and adjust their teaching strategies accordingly.	4.52	0.50	Strongly Agree
...integrate real-life problems and cooperative learning strategies to create meaningful learning experiences.	4.41	0.51	Strongly Agree
Weighted Mean	4.40		
SD	0.55		
Verbal Interpretation	Very High		

The highest mean is found for the statement “assess student understanding regularly and adjust their teaching strategies accordingly” ($M = 4.52$, $SD = 0.50$), with the remark “Strongly Agree”. This indicates that teachers feel very confident in their ability to assess student understanding and modify their instructional methods to meet students’ evolving needs.

The lowest mean is recorded for the statement “use scaffolding techniques and instructional materials to support different learning paces and maximize student success” ($M = 4.23$, $SD = 0.69$), with the remark “Strongly Agree”. While still high, this score suggests that teachers may face slightly more challenges in consistently implementing scaffolding techniques to cater to the varying paces of students, compared to other instructional strategies.

The computed weighted mean of 4.40, with a standard deviation of 0.55, indicates a very high level of instructional strategy efficacy among mathematics teachers. This suggests that they effectively utilize diverse instructional strategies, implement differentiated instruction, and adjust their teaching approaches based on student needs under the MATATAG Curriculum.

Overall, this implies that teachers are highly capable of adapting their instruction to enhance student learning outcomes. Providing further training on advanced instructional techniques, encouraging collaborative lesson planning, and integrating more real-world applications can further strengthen their instructional efficacy.

The findings are supported by Bachtiar (2024), who emphasized that teachers with high self-efficacy are more confident in using diverse instructional strategies. Additionally, Woo et al. (2018) discovered a weak but statistically significant correlation between individual teaching self-efficacy and instructional methods for putting STEM education into practice.

Table 15 presents the level of teaching efficacy of mathematics teachers in terms of classroom management.

The highest means are observed for the statements “recognize the importance of managing student behavior to maintain a productive learning environment” and “use engaging instructional strategies during mathematics lessons” (both $M = 4.53$, $SD = 0.52$), with the remark “Strongly Agree”. This indicates that teachers feel highly confident in their ability to manage student behavior and to use engaging instructional strategies, both of which contribute significantly to maintaining a positive and productive classroom environment.

TABLE 15. Level of Teaching Efficacy of Mathematics Teachers in terms of Classroom Management

The teachers...	MEAN	SD	REMARKS
...recognize the importance of managing student behavior to maintain a productive learning environment.	4.53	0.52	Strongly Agree
...implement clear classroom rules and expectations aligned with the MATATAG Curriculum.	4.26	0.69	Strongly Agree
...use engaging instructional strategies during mathematics lessons.	4.53	0.52	Strongly Agree
...implement proactive and time-efficient strategies and address classroom management challenges.	4.49	0.54	Strongly Agree
...foster an inclusive and respectful classroom atmosphere that promotes cooperation, collaboration, and positive interaction.	4.21	0.65	Strongly Agree
Weighted Mean	4.40		
SD	0.58		
Verbal Interpretation	Very High		

The lowest mean is recorded for the statement “foster an inclusive and respectful classroom atmosphere that promotes cooperation, collaboration, and positive interaction” ($M = 4.21$, $SD = 0.65$), with the remark “Strongly Agree”. While still indicating a strong belief in fostering a positive and inclusive classroom environment, this slightly lower score suggests that teachers may encounter occasional challenges in

fully establishing such an atmosphere in every classroom interaction.

The computed weighted mean (4.40), with a standard deviation of (0.58), indicates a very high level of classroom management efficacy among mathematics teachers. This suggests that they effectively manage student behavior, establish clear rules, and implement proactive strategies to create a productive learning environment under the MATATAG Curriculum.

Overall, this implies that teachers demonstrate strong classroom management skills, ensuring a structured and engaging learning atmosphere. Providing further training on positive behavior interventions, classroom engagement techniques, and inclusive teaching strategies can further enhance their effectiveness in managing classrooms.

The findings are supported by Zeb et al. (2024), who showed that self-efficacy improves classroom management and teaching practices, and Mitchell (2019), who found a

relationship between teacher self-efficacy and classroom management styles.

Test of Significant Relationship between the Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum and Teaching Efficacy

To test the significant relationship between the challenges encountered by mathematics teachers in the implementation of the MATATAG curriculum and teaching efficacy in terms of content mastery, resilience, innovation, instructional strategies, and classroom management, the Pearson Product-Moment Correlation Coefficient was employed using Jamovi 2.3.28.

Table 16 presents the results of the Pearson Product-Moment Correlation Coefficient examining the relationship between the challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum and their teaching efficacy across five domains: Content Mastery, Resilience, Innovation, Instructional Strategies, and Classroom Management.

TABLE 16. Significant Relationship between the Challenges Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum and Teaching Efficacy

Challenges (IV)		Teaching Efficacy (DV)				
		Content Mastery	Resilience	Innovation	Instructional Strategies	Classroom Management
Teachers' Readiness	Pearson Correlation	0.07	-0.15	0.01	-0.17	-0.43***
	Sig. (2-tailed)	.507	.123	.960	.093	<.001
	N	102	102	102	102	102
Resource Availability	Pearson Correlation	0.12	0.06	0.13	-0.02	-0.23*
	Sig. (2-tailed)	.246	.561	.195	.838	.022
	N	102	102	102	102	102
Institutional Support	Pearson Correlation	-0.01	0.06	0.11	0.02	0.178
	Sig. (2-tailed)	.931	.550	.286	0.847	.074
	N	102	102	102	102	102
Time Constraints	Pearson Correlation	-0.10	0.34***	-0.09	-0.27**	-0.52***
	Sig. (2-tailed)	.324	<.001	.394	.006	<.001
	N	102	102	102	102	102
Monitoring and Feedback	Pearson Correlation	0.08	0.10	0.31**	0.05	-0.18
	Sig. (2-tailed)	.450	.328	.002	.647	.065
	N	102	102	102	102	102

Note: *p<.05, ** p<.01, ***p<.001

The findings reveal varying degrees of relationship between different challenges and indicators of teaching efficacy. Teachers' Readiness showed a moderate negative relationship with Classroom Management ($r = -0.43, p < .001$), implying that teachers who felt unprepared for the curriculum faced difficulties in managing their classrooms effectively. Resource Availability had a weak negative relationship with Classroom Management ($r = -0.23, p = .022$), implying that limited teaching resources may slightly hinder classroom control. Time Constraints displayed a weak positive relationship with Resilience ($r = 0.39, p < .001$), suggesting that teachers experiencing time-related challenges tend to develop resilience. However, Time Constraints also showed significant negative relationships with Instructional Strategies ($r = -0.27, p = .006$) and Classroom Management ($r = -0.52, p < .001$), indicating that time limitations are associated with difficulties in lesson planning and classroom control. Monitoring and Feedback demonstrated a weak positive relationship with Innovation ($r = 0.31, p = .002$),

implying that structured feedback mechanisms may encourage teachers to adopt innovative teaching practices.

On the other hand, several of the relationships between challenges and indicators of teaching efficacy were found to be statistically not significant. Teachers' Readiness showed no significant relationship with Content Mastery, Resilience, Innovation, or Instructional Strategies, suggesting that perceived readiness may not directly impact these specific areas of teaching efficacy. Similarly, Resource Availability did not significantly relate to Content Mastery, Resilience, Innovation, or Instructional Strategies, implying that access to resources alone may not strongly influence these aspects. Institutional Support also showed no significant relationship with any of the teaching efficacy dimensions, which may indicate that teachers do not perceive institutional backing as a key factor in their day-to-day instructional performance or adaptability. Additionally, Time Constraints did not have a significant relationship with Content Mastery or Innovation, suggesting that time-related challenges may not directly affect teachers' mastery of subject content or their inclination to

innovate. Lastly, Monitoring and Feedback showed no significant relationship with Content Mastery, Resilience, Instructional Strategies, or Classroom Management, implying that while feedback systems might promote innovation, they do not appear to influence other areas of teaching efficacy.

Overall, this implies that while certain challenges negatively influence teaching efficacy and others show no significant relationship, time constraints and effective monitoring and feedback may still contribute to enhancing teachers' ability to adapt and innovate within the MATATAG Curriculum.

The findings align with those of Zeb et al. (2024), who found that a lack of preparation and limited resources negatively impact classroom management. Similarly, Time Constraints were found to hinder instructional strategies and classroom management, supporting the research by Cruz et al. (2025) that teachers are struggling with time constraints, which affects how well they teach.

Test of Significant Relationship between the Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum and Teaching Efficacy

To test the significant relationship between the opportunities encountered by mathematics teachers in the implementation of the MATATAG Curriculum and their teaching efficacy in terms of content mastery, resilience, innovation, instructional strategies, and classroom management, the Pearson Product-Moment Correlation Coefficient was employed using Jamovi 2.3.28.

Table 17 presents the results of the Pearson Product-Moment Correlation Coefficient examining the relationship between the opportunities encountered by mathematics teachers in the implementation of the MATATAG Curriculum and their teaching efficacy across five domains: Content Mastery, Resilience, Innovation, Instructional Strategies, and Classroom Management.

TABLE 17. Significant Relationship between the Opportunities Encountered by Mathematics Teachers in the Implementation of the MATATAG Curriculum and Teaching Efficacy

Opportunities (IV)		Teaching Efficacy (DV)				
		Content Mastery	Resilience	Innovation	Instructional Strategies	Classroom Management
Foundational Skills	Pearson Correlation	0.94***	0.73***	0.71***	0.60***	0.45***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001
	N	102	102	102	102	102
Cultural Relevance and Identity	Pearson Correlation	0.83***	0.64***	0.72***	0.59***	0.38***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001
	N	102	102	102	102	102
Flexible Learning Pathways	Pearson Correlation	0.73***	0.70***	0.81***	0.69***	0.50***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001
	N	102	102	102	102	102
Professional Growth	Pearson Correlation	0.77**	0.59**	0.37**	0.59**	0.37**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001
	N	102	102	102	102	102
Collaboration and Networking	Pearson Correlation	0.69***	0.49***	0.29***	0.50***	0.26***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001
	N	102	102	102	102	102

Note: *p<.05, ** p<.01, ***p<.001

The findings indicate weak to very strong positive correlations across all opportunities, implying that these factors significantly contribute to the teaching efficacy of mathematics teachers. Foundational Skills exhibited the highest correlations, particularly with Content Mastery ($r = 0.94, p < .001$) and Resilience ($r = 0.73, p < .001$), showing the importance of a strong knowledge base in enhancing teachers' confidence and adaptability. Cultural Relevance and Identity also showed significant positive correlations, with the highest being for Content Mastery ($r = 0.83, p < .001$), implying that integrating culturally responsive teaching strategies enhances teachers' understanding of subject matter and supports more effective instructional practices. Flexible Learning Pathways had the strongest correlation with Innovation ($r = 0.81, p < .001$), emphasizing the role of adaptable teaching methods in encouraging innovative practices. Professional Growth and Collaboration and Networking were also significantly correlated with all domains of teaching efficacy, with Professional Growth displaying notable associations with both Content Mastery ($r = 0.77, p < .001$) and Instructional Strategies ($r = 0.59, p <$

$.001$), indicating that continuous learning and professional development play a key role in effective teaching. Meanwhile, Collaboration and Networking showed weak to strong correlations, particularly with Content Mastery ($r = 0.69, p < .001$) and Instructional Strategies ($r = 0.50, p < .001$), implying that peer support and knowledge sharing contribute to improved teaching practices.

In general, this highlights the significance of the MATATAG curriculum's opportunities for foundational skills, cultural relevance and identity, professional development, flexible learning pathways, and collaboration and networking in improving mathematics teachers' effectiveness throughout the curriculum's implementation.

The findings are aligned with Darling-Hammond et al. (2017), who highlighted the critical role of continuous professional growth in enhancing content mastery and instructional strategies. Additionally, the positive relationship between professional growth and teaching efficacy supports the work of Kraft et al. (2018), who found that ongoing professional development fosters teacher efficacy.

IV. CONCLUSION AND RECOMMENDATIONS

Based on the findings above, the following conclusions were drawn:

There is a significant relationship between specific challenges encountered by mathematics teachers in the implementation of the MATATAG Curriculum, namely teacher readiness, resource availability, and time constraints, and particular indicators of teaching efficacy, especially instructional strategies and classroom management. Thus, the null hypothesis was partially rejected. This concludes that challenges related to readiness, resources, and time constraints negatively influence these indicators of teaching efficacy, while monitoring and feedback play a constructive role in fostering innovation. Additionally, institutional support does not appear to have a significant relationship with teaching efficacy.

There is a significant relationship between opportunities encountered by mathematics teachers in the implementation of the MATATAG Curriculum and teaching efficacy. Thus, the null hypothesis was rejected. This concludes that foundational skills, cultural relevance and identity, professional development, flexible learning pathways, and collaboration and networking significantly enhance mathematics teachers' teaching efficacy.

The following recommendations were made based on the findings:

DepEd may implement intensive training programs focused on instructional preparedness, classroom management, and assessment strategies.

Schools may collaborate with local government units and private organizations to provide essential teaching materials, ICT tools, and other resources.

Educational leaders may introduce a structured peer coaching and performance evaluation system may be introduced, along with professional learning communities where teachers can share best practices, lesson plans, and instructional strategies, fostering continuous professional development and innovation.

REFERENCE

[1]. Bachtiar, B. (2024). Insights into Classroom Dynamics: Indonesian EFL Teachers' Self-Efficacy in Instructional Strategies. *Jurnal Basicedu*, 8(1), 837-848. <https://doi.org/10.31004/basicedu.v8i1.7208>

[2]. Barlow, A., Cecchinato, G., & Galante, J. (2023). Resilience interventions do work: Why coping strategies should be a staple of education. *The Guardian*. Retrieved from <https://www.theguardian.com/society/2024/nov/24/resilience-interventions-do-work-why-coping-strategies-should-be-a-staple-of-education>

[3]. Budhi Santosa, E., Sukmawati, F., Juwita, R., Prihatin, R., Tri Cahyono, B., & Suparmi (2024). The Effect of Teachers' Level of Self-Regulated Learning and Internet Self-Efficacy on Teaching Innovation in the Constructivist Curriculum. *Jurnal Teknologi Pendidikan*. <https://journal.unj.ac.id/unj/index.php/jtp/article/view/48474/18124>

[4]. Cruz, A., De Jesus, A.J., Macasiog, C.J., Mamangun, A.A., Pineda, G., Ramos, A.D., Dominado, N. (2025). The Perceived Stress Level of Teachers' Handling MATATAG Curriculum. *Multinational Research Society Publisher*. 18-30. <https://doi.org/10.5281/zenodo.15007439>

[5]. Darling-Hammond, L., Hyster, M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute. <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>

[6]. Dayola, Y. M., Kilag, O. K., Noguera, R., Cojuangco, F., Wagas, H., & Uy, F. (2024). The MATATAG Curriculum: Strengthening Foundational Skills and 21st-Century Competencies in the Philippine Education System. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRIS)*, 1(9), 142-147. <https://risejournals.org/index.php/imjrise/article/view/667>

[7]. Flores, M.A. (2018). Teacher Resilience in Adverse Contexts: Issues of Professionalism and Professional Identity. In: Wosnitza, M., Peixoto, F., Beltman, S., Mansfield, C.F. (eds) *Resilience in Education*. Springer, Cham. https://doi.org/10.1007/978-3-319-76690-4_10

[8]. Gama J. (2024). Beyond the Four Walls: Teacher's Experiences in Championing the MATATAG Curriculum. *IMJRIS Volume 1*, (9). <https://doi.org/10.5281/zenodo.13667710>

[9]. Gqwabaza, N. & Thabisa M. (2024). The Role of Collaboration and Networking in the Digital Age: Students' Perspectives. *E-Journal of Humanities, Arts and Social Sciences* 5, no.11:1757-1769. <https://doi.org/10.38159/ehass.202451111>

[10]. Guiaselon, B. U., Luyugen-Omar, S., Mohamad, H. A., Maidu, N. U., Maguid, N. P., Samson, C. D., & Datu Raffy Ralph Sinsuat Sinsuat, M. (2022). Mismatch of Teachers' Qualifications and Subjects Taught: Effects on Students' National Achievement Test. *Psychology and Education: A Multidisciplinary Journal*. <https://hal.science/hal-04281560v1>

[11]. Gutierrez, D. (2024). Assessing Teacher Preparedness and Training for the Implementation of the MATATAG Curriculum at Calubcob I National High School. <https://doi.org/10.13140/RG.2.2.25744.42242>

[12]. Holvio, A. (2022). Impact of teacher content knowledge on student achievement in a low-income country. *WIDER*. The United Nations University World Institute for Development Economics Research (UNU-WIDER). Helsinki. <https://doi.org/10.35188/UNU-WIDER/2022/154-9>

[13]. Kilag, O. K., Andrin, G., Abellanosa, C., Villaver Jr, M., Uy, F., & Sasan, J. M. (2024). MATATAG Curriculum Rollout: Understanding Challenges for Effective Implementation. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRIS)*, 1(5), 172-177. <https://doi.org/10.5281/zenodo.11183037>

[14]. Kariippanon, K.E., Cliff, D.P., Lancaster, S.J., Okely, A.D., & Parrish, A-M. (2019). Flexible learning spaces facilitate interaction, collaboration and behavioural engagement in secondary school. *PLoS ONE* 14(10): e0223607. <https://doi.org/10.1371/journal.pone.0223607>

[15]. Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588. <https://doi.org/10.3102/0034654318759268>

[16]. Loza, J. (2024). How can Teachers Embrace Curriculum Change: Perceptions on the Implementation of MATATAG Curriculum. Retrieved from https://www.researchgate.net/publication/383460977_How_can_Teachers_embrace_Curriculum_Change_Perceptions_on_the_Implementation_of_MATATAG_Curriculum

[17]. Mitchell, M. (2019). *Teacher Self-Efficacy and Classroom Management*. Walden Dissertations and Doctoral Studies. 7701. <https://scholarworks.waldenu.edu/dissertations/7701>

[18]. Oginni, O.I. (2016). Effects of mathematics innovation and technology on students performance in open and distance learning. *Research in Pedagogy*, 6(2), 66-75. <https://doi.org/10.17810/2015.24>

[19]. Owens, A. & Oye, E., & Chris, E. (2024). The Role of Cultural Identity in Shaping Educational Experiences. https://www.researchgate.net/publication/388528815_The_Role_of_Cultural_Identity_in_Shaping_Educational_Experiences

[20]. Padillo, G. G., Manguilmotan, R. P., Capuno, R. G., & Espina, R. C. (2021). Professional development activities and teacher performance. *International Journal of Education and Practice*, 9(3), 497-506. <https://eric.ed.gov/?id=EJ1328399>

[21]. Roos, B. H., & Borkoski, C. C. (2021). Attending to the teacher in the teaching: Prioritizing faculty well-being. *Perspectives of the ASHA Special Interest Groups*, 6(4), 831-840. https://pubs.asha.org/doi/10.1044/2021_PERSP-21-00006

[22]. Saro, J., Montejo, C., Sucong, J., Bustamante, M. & Perez, J. (2024). A Qualitative Exploration on the Perceived Impact of the MATATAG Curriculum on Basic Education Teaching in the School Year 2024-2025. *Volume 4*, 952-966.

- https://www.researchgate.net/publication/383272918_A_Qualitative_Exploration_on_the_Perceived_Impact_of_the_MATATAG_Curriculum_on_Basic_Education_Teaching_in_the_School_Year_2024-2025
- [23]. Suprpto, N., Prahani, B., & Cheng, T. (2021). Indonesian Curriculum Reform in Policy and Local Wisdom: Perspectives from Science Education. *Jurnal Pendidikan IPA Indonesia*, 10. 69-80. 10.15294/jpii.v10i1.28438.
- [24]. Woo, P., Mohamad A., Ismail, Z. & Jumaat, N. (2018). Relationship between Teachers' Self-Efficacy and Instructional Strategies Applied among Secondary School Teachers in Implementing STEM Education. 454-461. https://www.researchgate.net/publication/330478246_Relationship_between_Teachers'_Self-Efficacy_and_Instructional_Strategies_Applied_among_Secondary_School_Teachers_in_Implementing_STEM_Education
- [25]. Zeb, I., Zhang, Y., & Khan, A. (2024). The relationship between teachers' self-efficacy and classroom management practices in secondary schools. *Forum for Education Studies*, 2(4), 1564. <https://doi.org/10.59400/fes1564>