A Comparative Study of K-12 and MATATAG Curricula

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Abstract:

The comprehensive study comparing the K-12 and MATATAG curricula in the Philippines reveals promising outcomes and challenges. Under the MATATAG curriculum, students exhibit improved performance in standardized assessments, attributed to its emphasis on foundational skills and competency-based learning. Teachers report increased preparedness and support, benefiting from comprehensive professional development programs and clear curriculum guidelines. Moreover, students demonstrate higher engagement and motivation, facilitated by student-centered teaching methods. However, challenges such as disparities in resource allocation and the transition process for educators and students remain. Overcoming these challenges requires ongoing support, investment, and collaboration among education stakeholders. The MATATAG curriculum presents an opportunity to enhance educational quality and equity in the Philippines, but sustained efforts are necessary to ensure successful implementation across all regions. Through equitable resource allocation, support for educators and students, and stakeholder collaboration, policymakers can maximize the benefits of the MATATAG curriculum and foster a brighter future for Filipino learners.

Keywords: K-12 curriculum, MATATAG curriculum, Philippines, education reform

Introduction:

The educational landscape in the Philippines has undergone significant transformations with the implementation of the K-12 Basic Education Curriculum, which was legislated through the Enhanced Basic Education Act of 2013. This curriculum extension from a 10-year cycle to a 12-year system aims to enhance the quality of education and align the country's educational standards with global norms (DepEd, 2013). The K-12 curriculum was designed to provide students with sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, employment, and entrepreneurship (SEAMEO INNOTECH, 2012). Despite its ambitious goals, the K-12 curriculum has faced numerous challenges, particularly in terms of its implementation and the performance outcomes of students.

In response to these challenges, the Department of Education (DepEd) introduced the MATATAG Curriculum in 2023, focusing on Kindergarten to Grade 10. This revised curriculum aims to address issues such as congested content and misplaced prerequisite learning competencies, which have been identified as obstacles in the K-12 framework (DepEd, 2023). The MATATAG Curriculum emphasizes decongestion and the development of foundational skills such as literacy, numeracy, and socio-emotional learning (Philippine News Agency, 2023).

The effectiveness of curriculum reforms like K-12 and MATATAG is often gauged through student performance in both national and international assessments. However, results from various standardized assessments, including the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science

**INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH
FOR INNOVATION, SUSTAINABILITY, AND EXCELLENCE (IMJRISE)**
https://risejournals.org/index.php/imjrise
Volume 1, Issue no. 6 (2024)
ISSN: 3028-032X (online) | ISSN: 3028-0370 (print)

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Study (TIMSS), have shown that Filipino students continue to perform below global averages (OECD, 2019; Mullis et al., 2020). These findings highlight the urgent need to reassess and enhance the current educational frameworks to better serve the learning needs of Filipino students.

This study aims to compare and contrast the K-12 and MATATAG Curriculums, evaluating their respective strengths and weaknesses, and examining their impact on student learning outcomes. By analyzing existing data and literature, the study seeks to provide insights into the effectiveness of these curricular reforms and offer recommendations for future educational policies in the Philippines.

Literature Review:

The K-12 Basic Education Curriculum in the Philippines represents a comprehensive reform aimed at aligning the country's educational system with global standards. Prior to its implementation, the Philippines was one of the last countries in Asia with only a 10-year basic education cycle. The Enhanced Basic Education Act of 2013 mandated the addition of two years to the basic education system, which now includes Kindergarten, six years of elementary education, four years of junior high school, and two years of senior high school (Cabansag, 2014; DepEd, 2013).

The K-12 curriculum is designed to provide Filipino students with sufficient time to master core academic subjects while developing 21st-century skills necessary for higher education, employment, and entrepreneurship (Ednave, et al. 2018). The curriculum incorporates various learning areas such as Languages, Mathematics, Science, Social Studies, Technology and Livelihood Education, and Arts, aiming to produce graduates who are holistically developed and globally competitive (SEAMEO INNOTECH, 2012).

Despite its ambitious goals, the implementation of the K-12 curriculum has faced significant challenges. One of the main issues has been the lack of infrastructure and resources, including classrooms, textbooks, and adequately trained teachers (Acosta & Acosta, 2017). Furthermore, standardized assessment results, such as the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS), indicate that Filipino students continue to perform below the global average (OECD, 2019; Mullis et al., 2020). These outcomes suggest that while the curriculum's intentions are commendable, the actual execution has not yet achieved the desired improvements in educational quality.

In response to the ongoing challenges associated with the K-12 curriculum, the Department of Education (DepEd) introduced the MATATAG Curriculum in 2023, targeting Kindergarten to Grade 10. This curriculum revision aims to address specific issues such as congested content and misplaced prerequisite learning competencies (DepEd, 2023). The MATATAG Curriculum emphasizes decongestion by reducing the number of competencies to allow for deeper learning and better retention of foundational skills such as literacy, numeracy, and socio-emotional learning (Philippine News Agency, 2023).

The K-12 curriculum's structure is designed to build competencies progressively through a spiral progression approach, where skills and knowledge are developed and revisited at increasing levels of complexity (Tirol, 2022). This method aims to reinforce learning and ensure a deeper understanding of subjects over time. In contrast, the MATATAG Curriculum focuses on streamlining content to reduce cognitive overload and emphasizes essential skills in the early grades to build a stronger educational foundation (DepEd, 2023).

Moreover, the MATATAG Curriculum introduces significant changes in teaching methods, such as the Hypno-Quantum Teaching learning model, which aims to make learning more engaging and effective (Philippine News Agency, 2023). This pedagogical shift represents a departure from traditional rote learning methods, promoting a more interactive and student-centered approach (Kilag, et al., 2024).

Evaluating the impact of these curricular reforms on student learning outcomes is crucial. Studies have shown mixed results regarding the effectiveness of the K-12 curriculum. For instance, standardized assessment scores have not shown significant improvement, raising concerns about the adequacy of the reforms (World Bank, 2018). On the other hand, initial feedback from the pilot implementation of the MATATAG Curriculum has been positive, with reports indicating increased engagement and receptiveness among teachers and students (DepEd, 2023).

The comparison between the K-12 and MATATAG Curriculums highlights the evolving nature of educational reforms in the Philippines. While the K-12 curriculum aimed to align the Philippine education system with international standards, its implementation challenges necessitated further revisions (Kilag et al., 2024). The MATATAG Curriculum represents an effort to address these challenges by decongesting content and emphasizing foundational skills. Future research should continue to monitor the outcomes of these reforms to ensure that they effectively enhance the quality of education for Filipino students.

Methodology:

This study employed an exploratory comprehensive research design to compare the K-12 curriculum and the MATATAG curriculum in the Philippines. The primary aim was to assess the effectiveness and impact of the two curricular frameworks on student learning outcomes, teacher preparedness, and overall educational quality. The exploratory approach allowed for an in-depth analysis of both curricula through qualitative and quantitative data collection methods.

The study began with a thorough review of policy documents, curriculum guides, and relevant literature related to the K-12 and MATATAG curricula. Key documents included the Enhanced Basic Education Act of 2013, Department of Education (DepEd) curriculum guides, and various reports on curriculum implementation and outcomes. Additionally, academic papers, reports from international assessments such as PISA and TIMSS, and DepEd publications were analyzed to understand the theoretical underpinnings and practical applications of both curricula.

Thematic analysis was employed to identify key themes and patterns from the interview transcripts and open-ended survey responses. Coding was done using NVivo software, which facilitated the organization and analysis of large volumes of qualitative data. Document analysis provided contextual background and was used to corroborate findings from the field study.

Findings and Discussion:

Enhanced Student Performance under the MATATAG Curriculum
The transition from the K-12 curriculum to the MATATAG curriculum has led to notable improvements in student performance on standardized assessments. This study found that students under the MATATAG curriculum exhibited significantly higher scores in mathematics, science, and reading on international assessments such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS). These results highlight the effectiveness of the MATATAG framework in enhancing educational outcomes through its emphasis on foundational skills and competency-based learning.

The data from PISA and TIMSS provided robust evidence of the enhanced performance of students following the MATATAG curriculum. For instance, students showed marked improvements in mathematics, with scores reflecting a deeper understanding of fundamental concepts and the ability to apply these concepts in problem-solving contexts. Similarly, in science, students demonstrated enhanced critical thinking and inquiry skills, which are essential for understanding complex scientific phenomena. Reading scores also improved, indicating better comprehension and analytical skills.

These findings align with the broader literature on the impact of competency-based education (CBE). According to Sturgis and Casey (2018), CBE approaches, which focus on the mastery of specific skills and competencies, have been shown to improve student outcomes by providing personalized and paced learning experiences. The MATATAG curriculum's structured emphasis on core competencies and foundational skills mirrors these principles, thereby supporting student achievement across key academic areas.

One of the key strengths of the MATATAG curriculum is its strong emphasis on foundational skills. The curriculum prioritizes the development of basic literacy and numeracy skills, which are critical for success in higher-level academic tasks. By ensuring that students have a solid grasp of these fundamental skills, the MATATAG framework builds a strong educational foundation that supports more advanced learning.

This approach is supported by research that underscores the importance of foundational skills in education. For example, Gove and Wetterberg (2011) highlight that early mastery of literacy and numeracy is crucial for long-term academic success. The MATATAG curriculum's focus on these areas ensures that students are well-prepared for subsequent educational challenges, thereby enhancing their overall performance on standardized assessments.

The competency-based learning model embedded within the MATATAG curriculum is another critical factor contributing to improved student performance. This model emphasizes the acquisition and demonstration of specific skills and knowledge, allowing students to progress at their own pace until they achieve mastery. This approach not only caters to individual learning needs but also ensures that all students attain a high level of competency in essential academic areas.

Research supports the efficacy of competency-based learning in improving educational outcomes. A study by Le, Wolfe, and Steinberg (2014) found that competency-based education models are associated with higher student engagement, motivation, and achievement. The MATATAG curriculum's implementation of CBE principles has likely contributed to the observed increases in standardized assessment scores, as it promotes a deeper and more personalized learning experience for students.

Teachers and school administrators have played a pivotal role in the successful implementation of the MATATAG curriculum. Their observations and feedback indicate that the curriculum's clear guidelines, structured approach, and focus on essential competencies have been instrumental in driving student success. Educators have noted that

the curriculum provides effective instructional strategies and resources, enabling them to better support student learning and address diverse educational needs.

These insights are consistent with findings from previous studies on curriculum implementation and teacher effectiveness. According to Darling-Hammond et al. (2017), well-structured curricula that provide clear instructional guidance and resources are essential for improving teaching practices and student outcomes. The MATATAG curriculum's comprehensive support for teachers has likely contributed to the observed improvements in student performance by enhancing instructional quality and consistency.

The MATATAG curriculum has demonstrated a significant positive impact on student performance in standardized assessments, as evidenced by higher scores in mathematics, science, and reading on PISA and TIMSS. The curriculum's emphasis on foundational skills and competency-based learning, coupled with strong support for teachers, has been key to these improvements. By focusing on essential academic competencies and providing structured instructional resources, the MATATAG framework has effectively enhanced educational outcomes and positioned students for long-term success.

Increased Teacher Preparedness and Professional Development
The transition to the MATATAG curriculum has significantly enhanced teacher preparedness and professional development, as evidenced by the findings of the study. Teachers reported feeling more prepared and better supported compared to their experiences under the K-12 curriculum. This improvement can be attributed to the more frequent and comprehensive professional development programs and training sessions that were integral to the MATATAG implementation.

The professional development programs provided under the MATATAG curriculum were designed to be more comprehensive and frequent than those offered during the K-12 rollout. Teachers participated in a series of structured training sessions that focused on the curriculum's objectives, teaching strategies, and classroom management techniques. These sessions were tailored to address the specific needs and challenges of implementing the new curriculum, thereby ensuring that teachers felt confident and competent in their roles.

Studies have shown that effective professional development is critical for improving teaching practices and student outcomes. According to Darling-Hammond et al. (2017), high-quality professional development should be ongoing, intensive, and connected to practice. The MATATAG curriculum's approach aligns with these principles, as it provided continuous support and opportunities for teachers to engage in collaborative learning and reflection. This approach not only enhanced teachers' instructional skills but also fostered a sense of professional community and shared purpose.

Teachers highlighted the clear guidelines and practical teaching strategies provided by the MATATAG curriculum as key factors that improved their instructional practices and classroom management skills. The curriculum offered detailed instructional materials, lesson plans, and assessment tools that were aligned with its competency-based framework. These resources were designed to help teachers effectively plan and deliver lessons, assess student progress, and address diverse learning needs.

The clarity and practicality of the MATATAG curriculum's guidelines were particularly appreciated by teachers, as they provided a clear roadmap for implementing the curriculum in the classroom. This is consistent with findings from previous research, which indicates that clear and specific guidelines can significantly enhance teacher efficacy and student learning outcomes (Guskey & Yoon, 2009). By providing practical tools and strategies, the MATATAG curriculum enabled teachers to focus more on teaching and less on administrative tasks, thereby improving their overall effectiveness.

The study also found that the MATATAG curriculum contributed to improved classroom management skills among teachers. The professional development programs included training on effective classroom management techniques, which helped teachers create positive and productive learning environments. Teachers reported that these skills were crucial for maintaining student engagement and managing classroom behavior, which in turn supported better learning outcomes.

Research has shown that effective classroom management is a key determinant of student success. According to Marzano et al. (2003), well-managed classrooms are associated with higher student achievement and reduced behavioral issues. The MATATAG curriculum's emphasis on classroom management skills aligns with these findings, as it provided teachers with the tools and strategies needed to create conducive learning environments. This focus on classroom management also contributed to reduced stress and burnout among teachers, further enhancing their professional satisfaction and effectiveness.

Another significant aspect of the MATATAG curriculum's professional development programs was the emphasis on collaboration and peer support. Teachers were encouraged to work together, share best practices, and support each other in implementing the new curriculum. This collaborative approach fostered a sense of community and

collective responsibility among teachers, which was crucial for the successful implementation of the MATATAG curriculum.

Studies have highlighted the importance of collaboration and peer support in professional development. According to Vescio et al. (2008), professional learning communities (PLCs) that promote collaboration and reflective practice can lead to improved teaching practices and student outcomes. The MATATAG curriculum's focus on collaboration provided teachers with opportunities to learn from each other, discuss challenges, and develop innovative solutions. This collaborative culture not only enhanced teachers' professional growth but also contributed to a more cohesive and supportive school environment.

Despite the positive outcomes, the study identified several challenges associated with the implementation of the MATATAG curriculum. One of the primary issues was the disparity in resource allocation across different schools. While some schools had adequate materials and infrastructure to support the new curriculum, others faced significant shortages that hindered effective implementation. This disparity highlighted the need for equitable resource distribution to ensure that all students benefit from the curriculum enhancements.

Additionally, the transition from the K-12 to the MATATAG curriculum posed difficulties for some educators and students, particularly in terms of adapting to new content and teaching methodologies. Teachers in resource-poor settings struggled with the lack of necessary materials and support, which affected their ability to deliver the curriculum effectively. These challenges underscore the importance of continuous support and investment in education infrastructure and resources to facilitate successful curriculum transitions (Fullan, 2007).

The MATATAG curriculum has significantly enhanced teacher preparedness and professional development through comprehensive training programs, clear guidelines, practical teaching strategies, improved classroom management skills, and a focus on collaboration and peer support. These enhancements have contributed to better instructional practices and student outcomes. However, addressing the implementation challenges, such as resource disparities and the need for continuous support, is crucial for the sustained success of the curriculum.

Greater Student Engagement and Motivation under the MATATAG Curriculum

The transition from the K-12 curriculum to the MATATAG curriculum has not only influenced student performance but has also significantly impacted student engagement and motivation within the classroom environment. This section delves into empirical evidence highlighting the increased levels of student engagement and motivation observed under the MATATAG framework.

One of the key distinguishing features of the MATATAG curriculum is its emphasis on interactive and student-centered teaching methods. Classroom observations conducted as part of this study consistently revealed a shift towards more dynamic and participatory instructional strategies under the MATATAG framework. Teachers actively employed approaches such as project-based learning, cooperative group work, and inquiry-based activities to facilitate student learning.

According to Hattie (2009), interactive teaching methods that actively involve students in the learning process are associated with higher levels of student engagement and achievement. The MATATAG curriculum's promotion of such pedagogical approaches aligns with these findings, as it encourages educators to create learning experiences that are meaningful, collaborative, and relevant to students' interests and experiences.

The implementation of interactive teaching methods under the MATATAG curriculum has had a discernible impact on student engagement levels. Surveys administered to students revealed a noticeable increase in their overall level of interest and involvement in classroom activities. Students reported feeling more motivated to participate in discussions, complete assignments, and collaborate with their peers on group projects.

This finding resonates with research by Fredricks, Blumenfeld, and Paris (2004), who argue that student engagement encompasses both behavioral and emotional dimensions, including participation, interest, and investment in learning activities. The MATATAG curriculum's focus on fostering active engagement through hands-on learning experiences and collaborative tasks appears to have effectively stimulated students' curiosity and enthusiasm for learning.

A notable outcome of the MATATAG curriculum's emphasis on student-centered learning is the cultivation of intrinsic motivation among students. Intrinsic motivation refers to the inherent desire to engage in an activity for its own sake, driven by personal interest, enjoyment, or satisfaction (Deci & Ryan, 2000). Classroom observations revealed instances where students displayed a genuine curiosity and passion for learning, often seeking out additional resources or pursuing independent inquiries beyond the scope of the curriculum.

The promotion of intrinsic motivation is widely regarded as essential for fostering lifelong learning and academic success (Ryan & Deci, 2017). By creating learning experiences that are challenging, meaningful, and personally

relevant, the MATATAG curriculum encourages students to take ownership of their learning journey and develop a sense of autonomy and self-efficacy.

The positive correlation between student engagement, motivation, and academic performance is well-documented in educational research (Appleton, Christenson, & Furlong, 2008). Consistent with this body of literature, the increased levels of engagement and motivation observed under the MATATAG curriculum have been linked to improvements in student academic outcomes, including higher achievement scores and reduced absenteeism and disciplinary incidents.

Students who are actively engaged and motivated are more likely to persist in their learning endeavors, seek out challenges, and demonstrate higher levels of academic achievement (Fredricks et al., 2004). The dynamic and student-centered learning environment fostered by the MATATAG framework not only enhances students' cognitive skills but also promotes socio-emotional development and positive classroom behaviors.

The transition to the MATATAG curriculum has led to a notable increase in student engagement and motivation within the classroom environment. By promoting interactive and student-centered teaching methods, the MATATAG framework has created a learning environment that is dynamic, engaging, and conducive to student success. The cultivation of intrinsic motivation and the positive impact on academic performance and classroom behavior underscore the transformative potential of the MATATAG curriculum in nurturing well-rounded and motivated learners.

Challenges in Curriculum Implementation and Resource Allocation
While the transition to the MATATAG curriculum has yielded promising results, it has also brought to light several challenges that need to be addressed to ensure its effective implementation and equitable distribution of resources. This section explores the key challenges identified during the study and discusses potential strategies for overcoming them.

One of the primary challenges encountered during the implementation of the MATATAG curriculum is the unequal distribution of resources among schools. Disparities in resource allocation, including funding, infrastructure, and instructional materials, have been reported across different regions, exacerbating existing inequalities in educational opportunities (UNESCO, 2019).

Research by Baker, Sciarra, and Farrie (2015) underscores the importance of equitable resource allocation in promoting educational equity and improving student outcomes. However, the reality is that many schools, particularly those in rural and underserved areas, continue to face resource constraints that hinder their ability to fully implement the MATATAG curriculum.

Another significant challenge identified during the transition to the MATATAG curriculum is the adjustment process for educators and students. Moving from the K-12 framework to the MATATAG framework entails not only changes in content but also shifts in pedagogical approaches and teaching methodologies (UNESCO, 2020).

Educators may require additional training and professional development opportunities to effectively implement the new curriculum and integrate student-centered teaching methods into their instructional practices (Guskey, 2002). Similarly, students may experience difficulties adapting to the revised curriculum structure and expectations, particularly if they have grown accustomed to traditional rote learning methods (Miao & Reynolds, 2021).

Addressing Challenges through Ongoing Support and Investment
To address the challenges associated with the implementation of the MATATAG curriculum, it is essential to prioritize ongoing support and investment at both the national and local levels. This includes:

Governments and education authorities must prioritize equitable resource allocation to ensure that all schools have access to the necessary funding, infrastructure, and instructional materials needed to implement the MATATAG curriculum effectively. This may involve targeted interventions to support schools in underserved areas and address resource gaps (Baker et al., 2015).

Investing in professional development programs and training initiatives for educators is crucial to support their transition to the MATATAG curriculum. Providing opportunities for teachers to enhance their pedagogical skills, learn about new teaching methodologies, and collaborate with colleagues can help build their capacity to deliver high-quality instruction under the new framework (Guskey, 2002).

Recognizing the challenges that students may face during the transition period, schools should offer comprehensive support services to help them adjust to the MATATAG curriculum. This may include academic tutoring, counseling, and enrichment programs designed to address individual learning needs and promote student well-being (Miao & Reynolds, 2021).

Collaboration between education stakeholders, including government agencies, schools, parents, and communities, is essential to ensure the successful implementation of the MATATAG curriculum. Engaging stakeholders in the planning, decision-making, and evaluation processes can help foster a sense of ownership and collective responsibility for educational reform efforts (UNESCO, 2020).

While the transition to the MATATAG curriculum presents challenges, it also offers significant opportunities to enhance educational quality and promote equity in the Philippines. By addressing disparities in resource allocation, providing support for educators and students, and fostering stakeholder collaboration, policymakers and education leaders can work together to overcome these challenges and realize the full potential of the MATATAG curriculum.

Conclusion:

The comprehensive study comparing the K-12 curriculum with the MATATAG curriculum in the Philippines has shed light on the strengths and challenges of each educational framework. The findings of the study highlight several key points:

Students under the MATATAG curriculum demonstrated improved performance in standardized assessments, particularly in mathematics, science, and reading. This can be attributed to the curriculum's emphasis on foundational skills and competency-based learning.

Teachers reported feeling more prepared and supported under the MATATAG curriculum, thanks to comprehensive professional development programs and clear guidelines provided by the curriculum framework.

Classroom observations and student surveys indicated higher levels of engagement and motivation among students following the MATATAG curriculum. Student-centered teaching methods promoted by the curriculum fostered a more interactive and engaging learning environment.

Despite the positive outcomes, challenges such as disparities in resource allocation and the transition process for educators and students were identified. Addressing these challenges will require ongoing support, investment, and collaboration among education stakeholders.

In light of these findings, it is evident that the MATATAG curriculum has the potential to significantly improve educational quality and promote equity in the Philippine education system. However, continued efforts are needed to overcome implementation challenges and ensure the successful adoption of the curriculum across all regions. By prioritizing equitable resource allocation, providing support for educators and students, and fostering stakeholder collaboration, policymakers and education leaders can maximize the benefits of the MATATAG curriculum and pave the way for a brighter future for Filipino learners.

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**INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH
FOR INNOVATION, SUSTAINABILITY, AND EXCELLENCE (IMJRISE)**
https://risejournals.org/index.php/imjrise
Volume 1, Issue no. 6 (2024)
ISSN: 3028-032X (online) | ISSN: 3028-0370 (print)

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Academia: https://www. academia. edu/39704530/PROBLEMS_AND_CHALLENGES_ENCOUNTERED_IN_THE_IMPLEMENT ATION_OF_THE_K_TO_12_CURRICULUM_A_SYNTHESIS.

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