A Review of the Initial Implementation of the MATATAG Curriculum in Grade 1 Mathematics: Basis for Localized Numeracy Activities

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Abstract — The study aims to review the extent of implementation of MATATAG curriculum in Grade 1 Mathematics in Mahaplag District. The study involved nine (9) teacher-respondents and one-hundred fifty (150) learners through proportional stratified sampling and complete enumeration, respectively. This further determines the extent of implementation of the curriculum and poses significant relationship among profile variables and numeracy results through descriptive- correlational design. The study reveals that the majority of teacher-respondents are between ages of 23 and 52, with a mean age of 35.4 years who are predominantly female, with a significant proportion being married holding a bachelor's degree with a sizeable proportion of 66.66% who participated in seminars and training sessions. With 52% female-learners, majority

of students are visual and kinesthetic learners, with a significant 78% having tutorship from their parents. Profile variables such as age, sex, civil status, highest educational attainment, number of years and seminars attended are significantly correlated to the extent of initial implementation of MATATAG curriculum. Teacher competence and preparedness are rated "very high extent" emphasizing the strong capabilities of teachers and effective alignment of instructional practices with curriculum standards with seven (7) domains requiring further development. The majority of students fall under Emerging and Low Proficient categories comprising fifty-eight (58%) of the respondents while only six and sixty-seven (6.67%) are highly proficient. Age, learning style, and tutorship significantly impact the teaching-learning process and learner engagement. All of the domains on curriculum implementation is significant but Teaching-Learning Process, School and Administrative Support and Challenges and Best Practices were significantly impactful with students' numeracy skills in both pre-test and post-test assessments. The study underscores the importance of cognitive, emotional, and behavioral engagement in learning outcomes, particularly in mathematics. A localized numeracy activities are designed to further enhance students' numeracy skills

Keywords: Curriculum , Numeracy , Implementation , Review, MATATAG

I.   INTRODUCTION

The development of foundational numeracy skills during the early years of formal education is critical in shaping a child's future learning trajectory. In the Philippines, the implementation of the MATATAG Curriculum under the K to 10 Basic Education Program aims to strengthen early numeracy competencies among learners. However, despite reforms and curriculum realignments, many Grade 1 learners continue to face difficulties in basic mathematical concepts such as counting, number recognition, place value, simple operations, and problem-solving (Tan & Reyes, 2016; SEI-DOST & UP NISMED, 2018). Despite educational reforms and curriculum realignments aimed at improving early numeracy skills, Grade 1 learners continue to

struggle with foundational mathematical concepts. These challenges include counting, number recognition, place value, basic operations, and problem-solving. Filipino learners consistently underperform in number sense and computation due to a lack of conceptual understanding and reliance on rote memorization. Additionally, learners often struggle with place value, which is crucial for advanced operations. Language issues, particularly in multilingual settings, also contribute to these difficulties (Magno & Agustin, 2017; Bautista, Bernardo, & Ocampo, 2017).

Studies reveal that Filipino primary learners often exhibit poor performance in mathematics compared to international standards. The Southeast Asia Primary Learning Metrics (SEAPLM) conducted by UNICEF and SEAMEO (2019) noted that a significant proportion of Grade 1 learners in the Philippines are not meeting minimum proficiency levels in mathematics. These difficulties are compounded by socio-economic disparities, lack of contextualized teaching strategies, insufficient instructional materials, and limited teacher training on differentiated instruction (Bernardo, 2017; Ulep, 2016). The Trends in International Mathematics and Science Study (TIMSS, 2019), which also showed that among participating countries, Filipino fourth-graders did the worst in mathematics. The study cited a number of factors for this poor performance, including large class sizes, limited access to technology, a lack of opportunities for higher-order thinking and problem-solving during classroom instruction, and a strong reliance on rote memorization rather than conceptual understanding. These systemic issues highlight the need for comprehensive educational reforms focused on improving teacher competency, improving instructional quality, and ensuring equitable access to learning materials in order to address the persistent issues with Filipino learners' numeracy development.

Moreover, assessments such as the Early Grades Mathematics Assessment (EGMA) show that Grade 1 learners struggle with number sense and fluency, which are foundational for higher-order mathematical skills (UNESCO, 2016). The World Bank (2019) also warned of a "learning crisis" in early numeracy, emphasizing that learners often move to higher grade levels without mastering basic math skills.

Teachers face several instructional challenges under the current curriculum framework, including large class sizes, lack of numeracy-focused interventions, and rigid lesson structures that fail to cater to diverse learning needs (Punzalan, 2018). As a result, there is a growing need to enhance numeracy learning by designing dynamic, responsive, and engaging instructional activities that align with the learning capacities of Grade 1 learners.

How can a nation expect its children to thrive in a complex, data-driven world when they are unable to master the simplest of mathematical concepts in the earliest years of school? Despite multiple waves of curriculum reform, including the K to 12 Basic Education Program and most recently, the MATATAG Curriculum, Filipino learners continue to score below minimum proficiency levels in both national and international large-scale assessments (PISA, 2018; SEA-PLM, 2019; DepEd, 2023). Globally, countries like Singapore, Finland, and Japan have shown that early mastery of numeracy is a cornerstone of lifelong learning, driven by strong foundational instruction and responsive pedagogical practices (Barber & Mourshed, 2007). In contrast, studies in the Philippine context highlight that teaching remains dominated by rote memorization and textbook dependency, with limited use of developmentally appropriate and engaging learning strategies (UNESCO, 2019; SEAMEO-INNOTECH, 2020). This persistent gap between policy intention and classroom practice reveals a critical research need: understanding how new curriculum frameworks like MATATAG are actually being implemented on the ground and whether they truly lead to enhanced learner numeracy skills.

Mathematics in the early grades is the precursor to a lifetime of learning, critical thinking and problem-solving. In the Philippines, basic numeracy remains to be an issue despite curriculum change in the last ten years. Filipino students have always been below threshold levels in national and international exams. The Southeast Asia Primary Learning Metrics (2019) revealed that Grade five learners lacked minimum numeracy competencies they should have, and this reflects an existing issue that likely stems from inadequate foundational training on previous grade levels including Grade 1. The K-12 Basic Education Curriculum that was implemented in 2013 aimed to improve education quality by encouraging learner-center, developmentally appropriate learning (DepEd, 2013). Teacher, school administrator and education stakeholder's feedback highlighted that the curriculum was too packed and put excessive stress on both teachers and students,

especially in Mathematics (UNESCO, 2019). This was a cause of concern regarding the adequacy of curriculum implementation to provide mastery over primary competencies like addition, subtraction, multiplication, number sense and problem solving.

To fill the gaps, the Department of Education launched the MATATAG curriculum as a step in reforming and enhancing the provision of core learning competencies with greater focus on core skills like literacy and numeracy (DepEd , 2020). MATATAG is a curriculum reform aimed at simplifying content, improving basic skills and value-driven education. This mathematics curriculum in mathematics specifically at the Grade 1 level, aims to make matters easier and enhance mastery by emphasizing key numeracy skills appropriate for each stage of development. Even with these encouraging advances, there remains a significant issue as to how can MATATAG instruction be transformed into dynamic learning activities that will capture learners develop long-term numeracy competencies.

Young students learn most effectively through interactive   and   scaffolded learning situations within their Zone of Proximal Development (ZPD).This demands learning activities that are more than mere memorization and rather promote reasoning, pattern identification, number fluency and context-rich problem-solving. Additionally, Cockcroft (2022) highlighted that numeracy is not just computation but comprehending numbers within context, estimating, reading data and applying logic within ordinary situations.

With the emerging learning crisis in the Philippines, the state has formulated a policy for a free and effective national learning intervention program to ensure that all learners who are struggling in their lessons, especially in reading and mathematics will be able to attain the competencies set by the Department of Education on their respective grade levels (Section 2, RA 12028). This initiative is relative to the study of national and international large scale assessment where proficiency level in reading and mathematics among Filipino learners is relatively low (DepEd, 2019,2023; UNICEF & SEAMEO, 2019). Furthermore, learning poverty in the Philippines climbed as high as 91% for numeracy and literacy which both taken from rapid assessments for reading and mathematics.

The existing instruction in the classroom, though, mostly relies on textbooks and rote drills, which deprive children of chances to investigate math meaningfully. It is necessary to transform towards learning designs that are learner-led, exploratory, and based on real-life contexts. With the consistent low math performance and the implementation of the MATATAG curriculum, this research is greatly applicable. It seeks to determine to which current Grade 1 mathematics teaching addresses the objectives of the MATATAG curriculum and how it can serve as a foundation for creating dynamic numeracy learning activities. These activities shall also resolve long-standing pedagogical difficulties. Key findings of this endeavor shall benefits teachers, curriculum designers and policymakers in improving instructional approaches and learning activities in early grade math.

Although the MATATAG Curriculum was launched with the promise of simplifying content and strengthening foundational skills in literacy and numeracy, little is known about how its principles are being translated into real instructional practices in early grade classrooms. The Department of Education (2020) emphasizes that MATATAG aims to make learning more focused, skill-based, and contextually relevant—yet classroom observations and early reports indicate that many teachers still struggle with adjusting to its learner-centered, problem-solving orientation (CEAP, 2023). Adding to this is the lack of localized learning materials that resonate with the everyday experiences of young Filipino learners. Cockcroft (2022) and Vygotsky's theory on the Zone of Proximal Development both argue for numeracy instruction that is interactive, context-rich, and scaffolded—elements often missing in the standard Philippine classroom. Thus, a key research gap lies in how the MATATAG curriculum is being implemented at the Grade 1 level, specifically in relation to localized numeracy development. There is a pressing need to assess not only curriculum delivery but also the creation of dynamic, culturally relevant learning activities that foster long-term numeracy competence among learners. This study addresses that gap by evaluating actual classroom practices and proposing evidence-based, localized interventions to bridge the divide between curriculum goals and educational outcomes.

This study provides a comprehensive evaluation of the initial implementation of the MATATAG Curriculum in Grade 1 Mathematics within Mahaplag 1 and 2 Districts under the Schools Division of Leyte for the School Year 2024–2025. By exploring teacher and learner

profiles, as well as analyzing the effectiveness of curriculum delivery and student numeracy performance, the study addresses the urgent need to strengthen foundational mathematics education. Findings shall offer valuable insights to educators, school administrators, and curriculum developers on areas of improvement, gaps in implementation, and strategies that can enhance learner outcomes. Moreover, the development of localized numeracy activities based on the study's results can directly support contextualized learning and contribute to the overall success of the MATATAG Curriculum nationwide.

This study is limited to the initial implementation of the MATATAG Curriculum in Grade 1 Mathematics in the public elementary schools of Mahaplag 1 and 2 Districts during the School Year 2024–2025. It focuses on the demographic and professional profiles of teachers and learners, the extent of curriculum implementation as perceived by teachers, and the assessment of students' numeracy through a pre- and posttest using the Rapid Mathematics Assessment tool. While the study aims to draw meaningful relationships among these variables and propose localized numeracy activities, it does not include other subject areas or grade levels, and relies on self-reported data and standardized assessments, which may present certain biases or limitations in interpretation.

Furthermore, it aims to evaluate the initial implementation of the MATATAG Curriculum in Grade 1 Mathematics in Mahaplag 1 and 2 Districts by examining the profiles of teachers and learners, assessing curriculum components and student numeracy outcomes, and analyzing the relationships among these variables to serve as a basis for proposing effective and localized numeracy activities tailored to the needs of the learners

Literature Review

Early mathematics education, particularly for Grade 1 learners, is crucial for developing foundational computational skills. These skills include fundamental arithmetic operations, number sense, place value, and patterns. Engaging in structured computational tasks boosts numerical fluency and problem-solving abilities (Clement and Sarama, 2019). Technology and manipulative

tools, such as digital games and interactive applications, can enhance these skills (Papadakis et. al, 2018). Teacher guidance and classroom discussions are essential for refining computational strategies. Grade 1 learners should cultivate a robust numerical understanding for future success in mathematics (Carpenter et. al, 2018).

Mathematical proficiency in Grade 1 learners is crucial for future achievement in mathematics. It includes procedural fluency, conceptual understanding, and number sense, which are essential for later success (Nguyan et.al, 2018). Early numerical competencies, such as counting, recognizing number patterns, and composing-decomposing numbers, are predictive of later success. Appropriate number system acuity also plays a significant role in shaping symbolic number understanding and later math performance. Intervention studies show that mathematical proficiency in early grades can be malleable, especially for learners with difficulties (Bryan et. al, 2021).

Effective curriculum implementation plays a vital role in developing mathematics proficiency among Grade 1 learners. Mathematics proficiency, which includes conceptual understanding, procedural fluency, and problem-solving, is significantly influenced by how consistently and thoroughly a curriculum is utilized in the classroom (Findell, 2021). A well-structured curriculum provides a coherent sequence of content that builds on children's prior knowledge, ensuring developmental appropriateness and alignment with learning goals (National Research Council, 2019). When teachers implement the curriculum with fidelity—adhering to its pacing, strategies, and assessments—learners are more likely to demonstrate higher achievement and deeper understanding in mathematics (Stein et al., 2017). Moreover, early exposure to curriculum-based learning trajectories, such as those described by Clements and Sarama (2018), strengthens foundational numeracy skills, which are essential for later academic success.

Degree of curriculum utilization can mediate disparities in learner outcomes, especially in early primary grades. In contrast, consistent use of evidence-based curricular materials supports the development of number sense, arithmetic strategies, and mathematical reasoning, especially when paired with targeted interventions (Powell & Fuchs, 2020). Teachers' professional development and understanding of curriculum goals further enhance the effectiveness of

curriculum use, leading to improved student proficiency (Ball & Cohen, 2019). Therefore, the extent to which a curriculum is utilized not only affects day-to-day instruction but also has lasting effects on students' long-term mathematics achievement.

Enhancing numeracy skills in early learners, especially in primary grades, necessitates timely and focused interventions that cater to both conceptual comprehension and procedural proficiency. Interventions that are explicit, systematic and centered on essential numeracy elements have demonstrated a significant improvement in mathematical outcomes (Gersten et.al, 2019). A particular effective strategy is the implementation of structured small group instruction, which facilitates differentiated teaching tailored to individual learner requirements. Fuchs et. al (2021) showed that early numeracy interventions are especially advantageous when administered frequently and consistently over time as they assist learners in developing foundational skills crucial for future mathematical achievement. Moreover, the incorporation of manipulatives, visual models and number lines can enhance learners' grasp of abstract concepts by rendering them more tangible and comprehensible (Jordan et. al, 2020)

Technology-driven interventions have also become increasingly recognized as effective tools for fostering numeracy development. Interactive software and digital games can offer personalized feedback, engaging practice and adaptive learning pathways that reinforce fundamental numeracy skills (Clarke et. al, 2019). Additionally, interventions that incorporate formative assessment enable teachers to track progress and modify instruction as needed, ensuring that learners stay on course (Clarke et.al, 2021). Furthermore, professional development for educators is another vital element as it provides teachers with effective strategies to apply evidence-based practices in mathematics instruction (Garet et.al, 2018). A multi-tiered approach to numeracy interventions – integrating direct instruction, meaningful practice and responsive teaching – to effectively assist learners at risk of lagging in mathematics.

II.   METHODOLOGY

Research Design

This study examines the initial implementation of MATATAG Curriculum in Math among the grade 1 learners and challenges encountered among the grade 1 teachers in Mahaplag 1 and 2 Districts in Leyte Division during School Year 2024-2025, as basis for localized numeracy activities.

The study shall utilize descriptive-correlational design which centers on determining significant relationship between the profile of the respondents and initial implementation of MATATAG curriculum; significant relationship between the profile of the respondent groups and the learners' numeracy based on the pre and posttest of Rapid Mathematics Assessment and significant relationship between the extent of initial implementation of MATATAG curriculum and the learners' numeracy based on the pre and posttest of Rapid Mathematics Assessment. Results of the study shall be the basis in crafting localized numeracy activities.

The descriptive aspect of the design will focus on outlining the profile of the respondents, the extent of MATATAG curriculum implementation, and the numeracy levels of students as determined through the pretest and posttest results of the Rapid Mathematics Assessment. The correlational aspect will aim to determine whether statistically significant relationships exist between and among variables.

Sample of the Study

The research engaged Grade 1 learners, teachers and school head from Mahaplag, Leyte, representing a well-rounded assortment of school categories. The selection process prioritized gender diversity, ensuring equal representation across each category. Samples were chosen using a maximal differentiation sampling method, which aims to capture a wide range of perspectives by including individuals from various backgrounds, such as different school types, educational levels, genders, administrative roles, and lengths of service. This approach, as noted by Creswell

(2014), facilitates a more profound comprehension of the phenomenon being investigated by analyzing the differences and similarities among a diverse set of experiences and viewpoints.

As to the determination of learner sample, the study shall utilize proportional stratified sampling where samples are equally distributed on different strata considering each profile variables of the study. On the other hand, teacher-respondents follows a stratified random sampling technique while complete enumeration shall be employed to determining school head-respondents.

To ensure the reliability and validity of the findings, the study utilizes multiple sampling techniques suited to each respondent group. Proportional stratified sampling will be used for learner-respondents to ensure that various subgroups based on profile variables are equally represented, allowing for more accurate analysis of numeracy outcomes before and after the implementation of the MATATAG curriculum. For teacher-respondents, stratified random sampling ensures fair representation across key characteristics such as teaching experience and training, which is essential in examining their role in curriculum implementation and its impact on student performance. Meanwhile, complete enumeration will be applied to school head-respondents, as their limited number makes it feasible and necessary to include all of them to capture comprehensive insights on curriculum supervision and leadership. Below is the table on the distribution of samples.

TABLE 1
DISTRIBUTION OF THE SAMPLE OF THE RESPONDENTS

School	District	Number of Teacher(s)	No. of Learners
Liberacion ES	Mahaplag I	1	3
Palanogan ES	Mahaplag I	1	17
Cuatro de Agusto ES	Mahaplag I	1	15
Mahayag ES	Mahaplag II	1	14
Union ES	Mahaplag II	2	43
San Isidro ES	Mahaplag II	1	28
Malinao ES	Mahaplag II	2	30
	Total	9	150

Measures

The study employs quantitative data. Upon stringent qualifications and considerations of nine (9) teacher-participants one-hundred-fifty (150) learner-respondents and seven(7) school heads, data are to be gathered, coded, analyzed and interpreted appropriately.

The study shall utilize three (3) research instruments. Each instrument aims to answer specific research question. The first instrument aims to determine the profile of the learner-respondents and their learning style through the guidance of their advisers. This instrument is adapted from Fleming and Kolb Learning Style Inventory which aims to label learners as visual, auditory, reading/writing and kinesthetics which shall be determined from the first twenty(20) statements while the remaining five (5) items determines whether they are diverging, assimilating, converging or accommodating based on Kolb's Learning Style Inventory.

The second instrument centers on determining extent of initial implementation of MATATAG curriculum related to the following components such curriculum content delivery, teaching–learning process, instructional resources and materials, assessment and feedback, teacher competence and preparedness, learner engagement and performance, school and administrative support, and challenges.

To determine the extent of initial implementation of MATATAG curriculum, the following scoring is adapted from Fleming and Kolb's Learning Style Inventory: 4.21 – 5.00 (Very High Extent); 3.41 – 4.20 (High Extent); 2.61 – 3.40 (Moderate Extent); 1.81 – 2.60 (Less Extent) and 1.00 – 1.80 (Very Less Extent).

The third instrument aims to determine numeracy skills among learners through administration of Rapid Math Assessment. Instrument to be used is the consolidated report on pre and post-test assessment: 85% - 100% At Grade Level (Highly Proficient) ; 75% - 84% Transitioning (Proficient); 50% - 74% Developing (Proficient); 25% - 49% Emerging (Low Proficient); Below 25% Emerging (Not Proficient).

To test the null hypothesis, as to the association of profile variables to the extent of initial implementation of MATATAG curriculum, pre and post-test RMA results and association of

extent of initial implementation of MATATAG curriculum and pre and post-test RMA results, the study utilized Pearson Product Moment of Correlation Index as follows: 0.90 to 1.00 (Very High Correlation), 0.70 to 0.90 (High Correlation), 0.50 to 0.70 (Moderate Correlation), 0.30 to 0.50 (Low Correlation), 0.00 to 0. 30 (Very Low Correlation).

The study utilized a adapted instrument and standardized Rapid Mathematics Assessment from the Department of Education. This further explicates that content validity is already established. Hence, it also underwent reliability test .

Procedures

The research will commence upon obtaining the necessary approvals and adhering to ethical standards. The first step involved securing the Committee's consent, which required a detailed evaluation of the study's objectives, methodologies, and ethical implications. Following this, the interview guide was subjected to an extensive review by subject matter experts and was tested for both validity and reliability to ensure its efficacy in collecting the desired data while maintaining the integrity of the research. Once the Committee granted its approval, authorization from the Dean was acquired through the Office of the School of Graduate Studies via a Notice to Proceed, officially initiating the research activities. Furthermore, permission was sought from the Schools Division Superintendent to facilitate access to the targeted participants and to ensure compliance with the division's regulations.

Prior to the interviews, participants will be requested to provide informed consent through a Consent and Release form, which details the study's objectives, participant rights, and confidentiality measures. This process guarantees that participants are fully informed about the research and that their participation is entirely voluntary. The scheduling of interviews will be arranged at the participants' convenience, utilizing various communication methods such as face-to-face meetings, phone calls, or online messaging to accommodate their preferences and ensure a comprehensive data collection.

Throughout the research process, ethical guidelines will be rigorously adhered to, including the maintenance of participant confidentiality, the acquisition of informed consent, and the respectful treatment of all participants. In accordance with the Data Protection and Data Privacy Act of 2012, all personal information collected will be securely stored and accessible solely by the research team for the purposes of the study. Measures will be implemented to protect participant identities, including the use of pseudonyms in any published research findings or reports.

Upon careful validation of the instruments, it shall be administered to the identified learners and teacher-participants.

Learners shall be tested through structured validated instrument which aims to determine their profile variables such as age, sex, learning style and tutorship. Furthermore, it also aims to determine the extent of academic performance among learners through competency mastery, improved engagement, assessment tools and curriculum focus.

For the teacher-participants, profile variables such as age, sex, civil status, highest educational attainment, number of years in teaching, and number of relevant trainings/seminars attended is determined through descriptive statistics.

The collected data will be coded and entered into a computer database. To analyze the data, descriptive quantitative statistics will be used to summarize and inferential statistics to examine the research premises. After the collection of data, the researcher will analyze it to identify patterns and relationships among variables.

Upon retrieval of research instrument, data shall be organized, tallied, scored and analyzed. Analysis of data is based on the kind of variables. Administration of research instrument and gathering of district Rapid Mathematics Assessment run from August 21, 2025 to September 3, 2025. Availability of teachers, overlapping of DepEd activities and teaching role were few among the hindering factors to gather data at the specified time. Hence, with proper coordination among respondents, the gatherings of data were made possible. On the other hand, incomplete data from the instrument fielded made the analysis of data statistically challenging.

For profile of the learners and teacher-participants, the study shall employ descriptive statistics such as frequency counts, mean and percentage. On the other hand quantitative data such as inventory of learning styles, extent of MATATAG curriculum implementation and level of numeracy skills of Grade 1 learners to each sub-category is determined through descriptive statistics such as mean.

To determine the association of profile variables to the extent of initial implementation of MATATAG curriculum, pre and posttest RMA results and association of extent of initial implementation of MATATAG curriculum and pre and post-test RMA results, the study utilized Pearson Product Moment of Correlation Index.

to the association of profile variables to the extent of initial implementation of MATATAG curriculum, pre and post-test RMA results and association of extent of initial implementation of MATATAG curriculum and pre and post-test RMA results, the study utilized Pearson Product Moment of Data gathered and evaluated from the instrument and statistically treated using different statistical tools. Cronbach's alpha will utilize to examine the inner constancy, dependability, and validity of the formulated instrument.

Data Processing

The data gathered were evaluated from the survey and statistically treated using various tools. Cronbach's alpha was used to examine the internal consistency, dependability, and validity of the instrument.

Frequency tallies and percentages summarized the respondent profiles and prevalence of responses related to the domains of MATATAG curriculum implementation. Moreover, a descriptive statistics is used on the RMA results among learners. Weighted means and standard deviations were calculated to determine the average perceptions of respondents regarding the extent curriculum implementation.

The Chi-square, point-biserial, spearman rho, pearson r, eta t-test and x test were used to assess the significant relationships between the extent of MATATAG implementation, profile variables and results of Rapid Mathematics Assessment (RMA). The information obtained served as the basis for understanding the correlation between these variables.

Ethical Considerations

This research strictly followed the ethical standards outlined in the Graduate Programs Manual of Operations, specifically Article VIII - Code of Ethics in Research. This adherence ensured that all phases of the research, from data collection to the dissemination of results, were executed with integrity, honesty, and transparency. The research process was marked by an accurate representation of findings and proper acknowledgment of contributions and sources, thereby upholding the tenets of ethical scholarship.

In selecting and treating participants, this study prioritized equity and fairness, ensuring that individuals were chosen based on relevant criteria without any form of discrimination and were afforded equal opportunities to engage in and benefit from the research. The safety and well-being of participants were of utmost importance, with thorough risk assessments conducted to mitigate any potential harm, whether physical, psychological, or emotional, during their involvement in the study.

Respect for human rights and dignity formed the cornerstone of this study's ethical framework, as evidenced by the process of obtaining informed consent. Participants were thoroughly briefed on the research's objectives, methodologies, and possible implications, while retaining the right to withdraw at any time without facing any negative consequences. Privacy and confidentiality were stringently upheld, with all personal information anonymized and securely stored. In the event of any ethical concerns, the study was dedicated to addressing them promptly in collaboration with the School of Graduate Studies Ethics Committee, ensuring adherence to established ethical standards and effectively resolving any issues.

By upholding these ethical principles, the study sought not only to provide valuable insights into the field of educational psychology but also to maintain the values of integrity, respect, and responsibility towards all participants and the broader academic community.

The study will be executed with academic professionalism, methodological competence, and ethical responsibility. The researcher acknowledges the importance of respecting the social and educational contexts of participants and will uphold the highest standards of scholarly integrity throughout the investigation. This ethical commitment serves not only to protect human subjects but also to reinforce the validity and trustworthiness of the research findings, which will inform instructional strategies and curriculum development under the MATATAG framework.

III.   RESULTS AND DISCUSSION

This section provides a summary of the results and discusses the findings of this study, focusing on the profile of the respondents, the extent of initial implementation of the MATATAG curriculum for Grade 1, the numeracy level of Grade 1 learners based on Rapid Mathematics Assessment Results, and the association of profile variables to the extent of initial implementation of the curriculum and numeracy level. Furthermore, this section presents the association between the numeracy skills among learners and extent of initial implementation of the curriculum.

Profile of respondents. The demographic and professional profile of Grade 1 teachers highlights significant characteristics pertinent to the study. The age profile ranged from 23 to 52 years, with a mean of 35.4 years old, where a large portion of forty-five (45%) is within the 30 to 39 year age range.

The data obtained from the comprehensive review of the MATATAG curriculum , numeracy skill among learners and its association the identified profile variables.This also observed the connection of the existing literature whether in conformity or in opposition of the study's significant findings.

Summary of Findings

The study aims at determining significant relationship between profile variables to the initial implementation of MATATAG curriculum as well as the numeracy skills among learners relative to the results of Rapid Mathematics Assessment.

The teacher-respondents were predominantly aged between 31 to 40 years, accounting for 45% of the sample, with a mean age of 35.4 years. Most of the participants were female (77%) and married (60%). In terms of educational attainment, 66% held a bachelor's degree, while 33% had pursued postgraduate studies. On average, the teachers had 10.2 years of teaching experience, with the majority (55%) having served for 6 to 15 years. Teachers reported attending an average of five training sessions over the past three years, with 44% having participated in three to six relevant seminars or training programs.

The learners involved in the study were mostly aged 6 to 7 years, with 54% being 7 years old, which is typical for Grade 1 students. The gender distribution was nearly equal, with 52% female and 48% male. In terms of learning preferences, the most common style observed was visual, followed by kinesthetic and auditory. Additionally, a significant portion of the learners received tutorship support, either from parents, guardians, or external tutors, suggesting a notable presence of academic assistance outside the classroom environment.

Teacher profile variables such as age, educational attainment, teaching experience, and trainings attended showed significant relationships with the extent of MATATAG curriculum implementation. Teachers with higher qualifications, more experience, and more professional development implemented the curriculum more effectively. On the other hand, learner profile variables including age, learning style, and tutorship were significantly related to curriculum implementation. Older learners, those with visual or kinesthetic learning styles, and those receiving additional academic support were more engaged and responsive. More so, learning style and tutorship had a significant positive impact on students' numeracy performance in both pre- and post-tests, indicating that tailored instruction and external academic support enhance numeracy skills.

The extent of initial MATATAG curriculum implementation, specifically in the areas of Curriculum Content Delivery, Teaching-Learning Process, and Learner Engagement, was significantly correlated with higher student numeracy scores. Furthermore, challenges and best practices in curriculum implementation also had a significant impact on numeracy performance, emphasizing the importance of addressing classroom and resource-related obstacles.

IV. CONCLUSIONS

The findings of the study underscore the critical role that both teacher and learner profile variables play in the successful initial implementation of the MATATAG curriculum and the enhancement of learners' numeracy skills. Teacher-related factors such as age, educational attainment, teaching experience, and participation in professional development activities were found to significantly influence how effectively the curriculum was implemented. Similarly, learner-related factors, particularly age, learning style, and the presence of tutorship, were significantly associated with their engagement and responsiveness to the curriculum. These variables also had a notable impact on learners' performance in the Rapid Mathematics Assessment, highlighting the importance of differentiated instruction and academic support systems.

Moreover, the domains of Curriculum Content Delivery, Teaching-Learning Process, and Learner Engagement within the MATATAG curriculum were found to be significantly correlated with improved numeracy outcomes, demonstrating that quality instruction and active student participation are essential for academic success. The study also revealed that addressing implementation challenges and promoting best practices can further enhance numeracy achievement. Overall, the results emphasize the need for continuous teacher training, responsive teaching strategies, and strong instructional support systems to ensure the effectiveness of curriculum reforms like MATATAG, particularly in foundational subjects such as mathematics.

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The findings of the study underscore the critical role that both teacher and learner profile variables play in the successful initial implementation of the MATATAG curriculum and the enhancement of learners' numeracy skills. Teacher-related factors such as age, educational attainment, teaching experience, and participation in professional development activities were found to significantly influence how effectively the curriculum was implemented. Similarly, learner-related factors, particularly age, learning style, and the presence of tutorship, were significantly associated with their engagement and responsiveness to the curriculum. These variables also had a notable impact on learners' performance in the Rapid Mathematics Assessment, highlighting the importance of differentiated instruction and academic support systems.

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