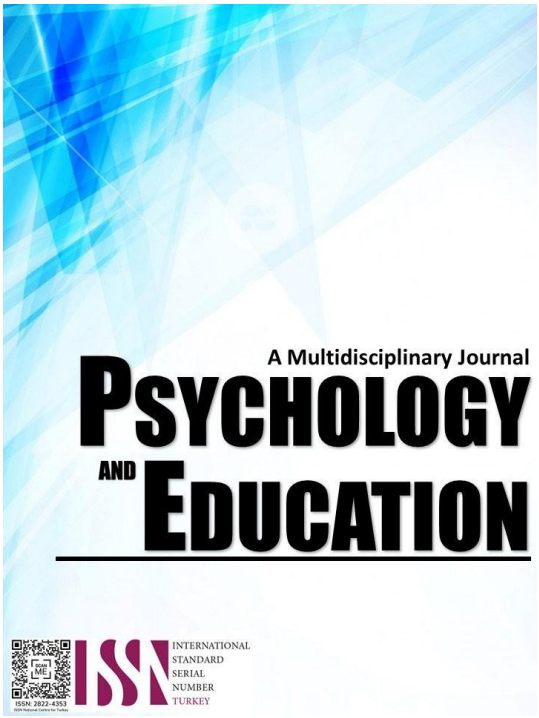
EFFECTIVENESS OF RAPID MATHEMATICS ASSESSMENT PROGRAM FOR PRIMARY GRADE PUPILS



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Research Article

Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils

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Abstract

The study aimed to determine the level of effectiveness of the Rapid Mathematics Assessment Program for primary grade pupils in public elementary schools in the Baras District Office during the School Year 2024-2025. A descriptive survey research design was applied, utilizing a researcher-made questionnaire checklist as a tool in gathering the needed data. The respondents of the study included the total population of primary grade teachers in the said schools, consisting of 146 teachers. The study revealed that teacher-respondents perceived Rapid Mathematics Assessment Program (RMAP) as much effective in terms of its objectives, intervention process, and monitoring and evaluation, with the obtained composite mean of 3.53. The level of effectiveness of the Rapid Mathematics Assessment Program for primary grade pupils does not differ significantly with respect to the cited variables. In addition, the level of performance of the primary grade pupils differs significantly in the RMA as revealed in the pretest and posttest results, with a p-value of .007, which is less than the standard significance level of 0.05. It was concluded that the performance of the primary grade pupils in Mathematics significantly improved after undergoing intervention activities in the Rapid Mathematics Assessment program. It was recommended that school administrators conduct continuous professional development on effective assessment practices, data analysis, and instructional planning based on RMAP results.

Keywords: *rapid mathematics assessment, numeracy skills, primary grade pupils*

Introduction

Education plays an important role in the development of an individual's personality, including intellectual, physical, social, emotional, and spiritual aspects. It has been recognized as a central factor of change and progress. Moreover, education is an engine for the growth and progress of any society. It is also responsible for building human capital, which breeds, drives, and sets technological innovation and economic growth.

Furthermore, education is a systematic process through which an individual acquires knowledge, experiences, skills, values, and attitudes. It is an indispensable part of life and the greatest instrument in equipping the youth with the necessary knowledge, information, skills, and attitudes to become productive citizens of the country. Likewise, education is a strong foundation for human development and a brilliant key to achieving success.

In this connection, Memorandum DM-CT-2024-284 – Administration of the Rapid Mathematics Assessment (RMA) and Comprehensive Literacy Assessment (CRLA) for Grades 1 to 3 for the Beginning of the School Year 2024-2025 emphasizes that schools must take stock of assessment and grading practices that will most meaningfully support learner development and respond to varied contexts at this time.

Hence, the Philippine government, together with the Department of Education, is doing its best to guide the assessment of student learning and the grading scheme. Teachers need a lot of techniques and evaluation tools to evaluate the learning outcomes of their students. Indeed, teachers have great concern about the quality of assessment they perform.

One of the subjects in the basic education curriculum that needs rigorous assessment of learning is Mathematics. Mathematics education is a cornerstone of cognitive and problem-solving development, particularly during the formative years of schooling. Early-grade mathematics proficiency lays the groundwork for future academic success and real-world applications.

Despite this emphasis, persistent challenges continue to hinder progress, including limited teacher capacity, inconsistent instructional strategies, and socioeconomic disparities that affect learners' performance globally. In the Philippine context, the state of mathematics proficiency among elementary learners remains a critical concern. These barriers often result in learners struggling with fundamental mathematical concepts, ultimately affecting their readiness to tackle more complex topics in higher grades.

Based on the findings of Dy (2024) on her study entitled Mathematics Proficiency Level Among the Grade Three Pupils in Cagayan de Oro City Division, the pupils' performance as indicated in the mean of 18.660 is described as Developing. This means that most of the pupils need to improve their performance in Mathematics. Although there were 43.3% of the pupils were described as proficient, the overall performance is still low.

In view of the issues, the Rapid Mathematics Assessment (RMA) is a diagnostic tool designed to provide an efficient and comprehensive evaluation of learners' mathematical proficiency. The RMA assesses foundational skills such as number recognition, basic operations, and problem-solving, which are critical for early-grade learners. By employing a rapid and reliable framework, the RMA facilitates timely interventions, ensuring that struggling learners receive targeted support before their challenges compound. This makes the RMA particularly suited for contexts like the Philippines, where resource constraints and large class sizes necessitate efficient

tools for measuring academic performance.

The Department of Education (DepEd) administers the Rapid Mathematics Assessment (RMA) to identify and address gaps in students' mathematical skills. The Rapid Mathematics Assessment is administered at the beginning and end of each school year. All students in grades 1–3 enrolled in DepEd schools take the RMA. The RMA is a diagnostic tool that evaluates students' mathematical skills against grade-level competencies. The assessment is based on the most essential learning competencies (MELCs) for each grade level.

Instead of this, the researcher wants to determine the effectiveness of the abovementioned assessment program in determining the intervention strategies to boost the pupils' proficiency in Mathematics.

Research Questions

The study aimed to determine the level of effectiveness of the Rapid Mathematics Assessment Program for primary grade pupils in public elementary schools in the Baras District Office during the School Year 2024-2025. Specifically, this study sought answers to the following questions:

1. What is the profile of the teacher-respondents in terms of:
    1.1. age;
    1.2. sex;
    1.3. civil status;
    1.4. educational attainment;
    1.5. length of service;
    1.6. position title; and
    1.7. in-service trainings attended?
2. What is the level of effectiveness of Rapid Mathematics Assessment Program for primary grade pupils as perceived by the teacher-respondents with respect to:
    2.1. objectives;
    2.2. intervention process; and
    2.3. monitoring and evaluation?
3. Is there a significant difference on the level of effectiveness of Rapid Mathematics Assessment Program for primary grade pupils as perceived by the teacher-respondents with respect to the different aspects in terms of their profile?
4. What is the level of performance of primary grade pupils as revealed in the pretest and posttest results in the Rapid Mathematics Assessment?
5. Is there a significant difference between the performance of the primary grade pupils in the pretest and posttest results in the Rapid Mathematics Assessment?
6. What is the extent of the challenges encountered in the implementation of Rapid Mathematics Assessment Program in public elementary schools?

Literature Review

Yankey (2021) stated that a strong foundation in literacy and numeracy is vital for every child and young person, and underpins their ability to engage in education, reach their potential, and participate fully in the community. This contributes to a virtuous circle, in which characteristics such as the ability to reason critically, to experiment, and to be resilient and persistent also support the development of literacy and numeracy.

Relatively, Holt (2021) stated that assessment in mathematics and numeracy is more than forming judgements about a learner's ability. It monitors the learner's understanding of the mathematical language, concepts, and skills, and what they need to do to succeed. This requires: an understanding of how learning develops; what skills and knowledge learners need to progress; and the common misunderstandings that can delay learning.

According to Denver (2022), the set of assessments chosen could include those that are locally designed and others that are selected from assessments that have been developed and used by the wider educational community. Assessment approaches should be chosen for their capacities to capture information most relevant to the knowledge, skills, and dispositions targeted in the assessment.

Likewise, Raquiza (2024) explained that Rapid Mathematics Assessment (RMA) is a tool that helps teachers identify students' mathematical strengths and areas for improvement. The RMA is typically administered during the first quarter of the school year. It includes an oral pre-assessment and a post-assessment at the end of a 5-week program. The assessment materials include a teacher's booklet, student materials, and automated scoring sheets.

Also, Luna (2022) stated that Mathematics assessments can help both students and teachers improve the work the students are doing in mathematics. Students need to learn to monitor and evaluate their progress. Assessment is an important part of mathematics teaching and learning. Students need to know how they are doing as they learn. This is because knowledge of current understanding gives students a source of awareness of their achievement, which may motivate them to learn more.

In a similar vein, the study of Tolibas (2025) assessed the mathematical proficiency of learners in Grades 1 to 3 at a public elementary school in the DepEd Tacloban City Division using Rapid Mathematics Assessment (RMA) outcomes. The findings underscored the need for targeted interventions to address gaps in mathematical proficiency. The study concluded that early intervention programs are essential to enhance foundational mathematics skills, ensuring learners are equipped for higher-level concepts. The cited study is very similar to the present study since both focused on Rapid Mathematics Assessment. Both studies considered primary grade pupils.

More so, the study of Pitogo (2023) showed that the numeracy skills of the pupils were at an advanced level. The pupils' performance in Mathematics was at an outstanding level. There exists a significant difference between the numeracy skills and Mathematics performance among the pupils. It is recommended that teachers and parents continue to provide guidance and assistance to the pupils. The reviewed study and the current study are connected since they both focused on the assessment in Mathematics.

Furthermore, Abrenica (2024) explored the landscape of mathematics education in the Philippines, focusing on challenges and opportunities for improvement. The implementation of the K to 12 curriculum program revealed hurdles in aligning curriculum objectives with instructional practices and assessment methods, emphasizing the need for comprehensive reforms. Teacher qualifications emerged as a critical factor influencing student achievement in mathematics, underscoring the importance of ongoing professional development. This study is related to the present since it aimed to determine the challenges in the implementation of assessment in Mathematics.

Collectively, these studies illustrate that effective mathematics assessment—particularly tools like RMA- not only measures student learning but also informs instruction, identifies areas for intervention, and supports the holistic development of learners. The present study aligns with this body of research by focusing on the implementation and outcomes of RMA in primary grade pupils, highlighting the importance of assessment in improving mathematical proficiency.

Methodology

Research Design

The study applied the descriptive method of research, specifically the survey design. A questionnaire checklist was utilized as a tool for gathering data and information for the study. According to Zulueta (2020), the descriptive survey research design is designed to gather information about the evaluation of present/existing conditions. It is helpful to express the cause of the phenomena. It involved the collection of data in order to test a hypothesis or answer questions concerning the current status of the study.

The researcher believed that the descriptive survey is appropriate to the present study since the nature of the study involves the gathering and interpreting of detailed information. The cited research design was used to determine the level of effectiveness of the Rapid Mathematics Assessment program for primary grade pupils. Documentary analysis was used since the results of the Rapid Mathematics Assessment were obtained as the basis of the level of Mathematics performance of primary grade pupils.

Respondents

The study considered the total population of grade three teachers in public elementary schools in the Baras District Office. This consists of 146 teachers. The teacher-respondents were from the 11 elementary schools in the district of Angono in Rizal, who were chosen using a total enumeration sampling technique. They were described in terms of age, sex, civil status, position title, educational attainment, length of service, and in-service training attended.

Instrument

The instrument used in the study is a researcher-made questionnaire checklist. This served as the main instrument in gathering sufficient data needed for the study. The questionnaire checklist has three parts. Part I consists of the personal data of the teacher-respondents such as age, sex, civil status, position title, educational attainment, length of service, and in –service trainings attended.

Part II focused on the level of effectiveness of the Rapid Mathematics Assessment program for primary grade pupils with respect to objectives, intervention process, and monitoring and evaluation. Each aspect consists of 10 items with a total of 30 items.
Documentary analysis was applied since the level of performance in Mathematics of 100 primary grade pupils was obtained based on the pretest and posttest results in the Rapid Mathematics Assessment. Part III dealt with the challenges encountered in the implementation of Rapid Mathematics Assessment program in public elementary schools. This consists of 10 items.

To check the validity of the items included in the research instrument, the researcher sought the help of research experts for their comments and suggestions on the research instrument. These include the school RMA coordinator, principal, as well as the thesis adviser, statistician, dean, and other professorial lecturers. Their recommendations were included in the finalization of the research instrument.

Procedure

The researcher was guided by a Gantt Chart of Activities for the conduct of the study. This includes the conceptualization of research problems up to the conduct of some readings in order to come up with the development of the study. After the validation of the

instrument, permission from the concerned authorities was secured by the researcher. The questionnaire checklist was administered to the respondents through a face-to-face situation to ensure that the respondents were guided in completing the tool. The Data Privacy Act of 2012 was considered in gathering the needed information. Results of the Rapid Mathematics Assessment for primary grade pupils were obtained. The pre-test was given during the fourth week of the opening of classes, while the post-test was given during the third week of the end of the school year.

Data were treated using appropriate statistical tools utilizing the Statistical Package for the Social Sciences (SPSS). Then, analysis and interpretation of data followed. A summary of findings, conclusions, and recommendations was formulated. After the oral defense, the manuscript was revised based on the comments and suggestions of the Oral Examination Committee. The manuscript was also subjected to an anti-plagiarism test.

Data Analysis

This study used various statistical tools to analyze the gathered data. To determine the profile of the respondents in terms of the selected variables, frequency, percentage, and rank distribution were utilized. In addition, a weighted mean was applied to determine the level of effectiveness of the RMA program for primary grade pupils with respect to the different aspects as perceived by the respondents. Also, to determine the significant difference in the level of effectiveness of the RMA program for primary grade pupils with respect to the different aspects as perceived by the respondents in terms of their profile, one-way analysis of variance was applied. Meanwhile, frequency and percentage distribution were used to determine the level of performance of primary grade pupils as revealed in the pretest and posttest results in the RMA. Furthermore, to determine the significant difference between the level of performance of primary grade pupils as revealed in the pretest and posttest results in the RMA, an independent t-test was applied. Lastly, the weighted mean was used. determine the extent of the challenges encountered in the implementation of RMA.

Ethical Considerations

Ethical considerations were carefully observed throughout the conduct of this study. Prior to data collection, informed consent was obtained from all participants, and they were clearly informed about the purpose of the research, their voluntary participation, and their right to withdraw at any time without penalty. Confidentiality and anonymity of responses were strictly maintained, and all data were used solely for academic purposes. Permission from concerned authorities was secured, and the study ensured that no physical, psychological, or emotional harm was inflicted on any participant, especially considering the involvement of young learners.

Results and Discussion

Profile of the Teacher- Respondents in Terms of the Selected Variables

Table 1. *Profile of the Teacher-Respondents*

Profile	*Frequency*	*Percentage*	*Rank*
Age			
51 years old and above	52	35.6	1
41 – 50 years old	34	23.3	3
31 – 40 years old	35	24.0	2
21 – 30 years old	25	17.1	4
Total	146	100.0	
Sex			
Male	14	9.6	2
Female	132	90.4	1
Total	146	100.0	
Civil Status			
Single	60	41.1	2
Married	77	52.7	1
Separated/Annulled	6	4.1	3
Widow/Widower	3	2.1	4
Total	146	100.0	
Educational Attainment			
MA with Doctorate units	5	3.4	4
Masters' Degree	36	24.7	3
With MA units	64	43.8	1
Bachelors' Degree	41	28.1	2
Total	146	100.0	
Length of Service			
25 years and above	35	24.0	2
20 – 24 years	32	21.9	3
15 – 19 years	12	8.2	5
10 – 14 years	21	14.4	4

5 – 9 years	39	26.7	1
4 years and below	7	4.8	6
Total	146	100.0	
Position Title			
Master Teacher I	9	6.2	4
Teacher III	36	24.6	3
Teacher II	52	35.6	1
Teacher I	49	33.6	2
Total	146	100.0	
In-Service Trainings Attended			
International Level	23	15.8	4
National Level	36	24.7	2
Regional Level	17	11.6	5
Division Level	37	25.3	1
District Level	25	17.1	3
School Level	8	5.5	6
Total	146	100.0	

It can be seen from the table that in terms of age, among 146 teacher-respondents, there are 52 or 35.6 percent who are aged 51 years old and above; followed by 35 or 24.0 percent who belong to age bracket of 31-40 years old; while 34 or 23.3 percent are aged 41-50 years old and 25 or 17.1 percent who are aged 21-30 years old. In terms of sex, the majority of them are female with 132 or 90.4 percent, and only 14 or 9.6 percent are males. As regards their civil status, several of them are married with 77 or 52.7 percent; followed by single with 60 or 41.1 percent; likewise, only 6 or 4.1 percent are separated/annulled and 3 or 2.1 percent are widow/widower.

In terms of educational attainment, most of them are with MA units with 64 or 43.6 percent; followed by Bachelor's Degree with 41 or 28.1 percent; while only 5 or 3.4 are MA with Doctorate units. As regard to length of service, the majority are teaching for 5-9 years with 39 or 26.7 percent; followed by 25 years and above with 35 or 24.0 percent; otherwise, only 12 or 8.2 percent stayed in teaching for 15-19 years and only 7 or 4.8 percent have 4 years and below teaching experience. In terms of position title, several of them are Teacher II with 52 or 35.6 percent; followed by Teacher I with 49 or 33.6 percent; while a few of them are Master Teacher I with only 9 or 6.2 percent, who attended in-service trainings in the Division and National Level, and few have attended in the International and Regional Levels.

Level of Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils as Perceived by the Teacher-Respondents with Respect to the Different Aspects

Table 2. *Level of Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils as Perceived by the Teacher-Respondents with Respect to Objectives*

Objectives *The objectives of Rapid Mathematics Assessment Program for Primary Grade Pupils…*	*Weighted Mean*	*Verbal Interpretation*
1. Evaluate mathematical proficiency of pupils.	3.98	Much Effective
2. Assess the mathematical skills of students in grades 1–3 to identify their strengths and areas for improvement.	3.63	Much Effective
3. Allocate resources effectively by identifying specific learning needs and areas requiring additional support;	3.75	Much Effective
4. Determine areas where students struggle with mathematical concepts, such as addition, subtraction, problem-solving, and number sense.	3.59	Much Effective
5. Provide teachers with data to inform instructional strategies tailored to individual student needs.	3.58	Much Effective
6. Track student growth over time, allowing educators to measure the effectiveness of teaching methods and interventions.	3.72	Much Effective
7. Foster a positive attitude towards mathematics by offering a supportive environment for assessment.	3.72	Much Effective
8. Evaluate the performance and progress of learners in mathematics during the national learning camp	3.61	Much Effective
9. Evaluate the foundational mathematical skills of pupils.	3.47	Moderately Effective
10. Identify the mathematical profiles of learners to assess their grade readiness.	3.62	Much Effective
Overall Mean	3.67	Much Effective

It can be gleaned from the table that with respect to objectives, the overall mean obtained is 3.67, verbally interpreted as Much Effective, with most of the items also interpreted as Much Effective, and the remaining one item interpreted as Moderately Effective. The findings indicate that the Rapid Mathematics Assessment Program (RMAP) is perceived by teacher-respondents as being effective with respect to its objectives, suggesting that the program successfully aligns with and addresses the intended learning goals in mathematics for primary grade pupils. It implies that RMAP not only supports the development of foundational math skills but also enhances instructional planning by providing timely feedback. As such, the perceived effectiveness of the program reinforces its value as a tool

for formative assessment, encouraging data-driven teaching practices and potentially leading to improved student outcomes in mathematics.

This is supported by the idea of Fellias (2022), that the proponents of mathematics education reform have expressed the view that the objectives of more and better mathematics learning for all students cannot be realized if assessment remains wedded to what is easy to measure and what has traditionally been taught. The messages sent by new views of content, teaching, and learning will be contradicted by the values that such assessment practices communicate.

Table 3. *Level of Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils as Perceived by the Teacher-Respondents with Respect to Intervention Process*

Intervention Process *Rapid Mathematics Assessment Program for Primary Grade Pupils…*	*Weighted Mean*	*Verbal Interpretation*
1. Provide ongoing training for teachers which focuses on innovative strategies for teaching problem-solving	3.76	Much Effective
2. Integrate literacy with Mathematics which could improve student performance in different areas.	3.49	Moderately Effective
3. Develop a more integrated curriculum that emphasizes the connection between mathematical concepts and real-life applications	3.49	Moderately Effective
4. Implement math intervention programs	3.73	Much Effective
5. Conduct Math-specific tutoring or peer mentoring which can provide targeted support for students who exhibit learning gaps.	3.77	Much Effective
6. Encourage parents to engage with their children's mathematical learning at home through games and practical activities can reinforce skills and build confidence	3.53	Much Effective
7. Provide practical activities which can reinforce skills and build confidence	3.53	Much Effective
8. Provide the right level of intervention for learners and ensuring that no student is left behind	3.49	Moderately Effective
9. Provide enhancement activities in Mathematics.	3.49	Moderately Effective
10. Provide remediation activities for slow learners in Mathematics.	3.52	Much Effective
Overall Mean	3.58	Much Effective

It can be reflected from the table that with respect to the intervention process, the overall mean obtained is 3.58, verbally interpreted as Much Effective, with six items also interpreted as Much effective, and the remaining four items are interpreted as Moderately Effective. The finding that the Rapid Mathematics Assessment Program (RMAP) is perceived by teacher-respondents as equally effective with respect to the intervention process indicates that the program plays a vital role in identifying learners' difficulties and addressing them through timely and appropriate instructional support.

The effectiveness perceived in this area implies that the assessment results are not only diagnostic but also actionable, empowering teachers to make informed decisions that directly impact students' learning experiences. Furthermore, it highlights the program's potential to reduce learning gaps and prevent long-term academic delays in mathematics among primary grade pupils. This is related to the study of Sortwell et al. (2025), that that formative assessment—especially when combining teacher, peer, and self-assessments with timely feedback—has measurable, positive effects on cognitive and noncognitive student outcomes. Their findings stress that assessment data becomes truly effective only when teachers leverage it to adapt instruction, closely mirroring RMAP's process-oriented design and its goal of closing learning gaps early.

Table 4. *Level of Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils as Perceived by the Teacher-Respondents with Respect to Monitoring and Evaluation*

Monitoring and Evaluation *Rapid Mathematics Assessment Program for Primary Grade Pupils…*	*Weighted Mean*	*Verbal Interpretation*
1. Allow teachers to record student results on provided scoresheets	3.38	Moderately Effective
2. Makes school heads upload school summaries to provided links after all students have been assessed.	3.38	Moderately Effective
3. Let students undergo a 30-minute one-on-one assessment to identify strengths and areas for improvement.	3.69	Much Effective
4. Helps teachers and school leaders implement targeted support and instructional strategies.	3.38	Moderately Effective
5. Provides continuous assessment and iterative improvement which are essential not only for student success but also for cultivating a lifelong appreciation of mathematics.	3.38	Moderately Effective
6. Monitor the learner's understanding of the mathematical language, concepts and skills and what they need to do to succeed.	3.38	Moderately Effective
7. Determine strengths and areas for improvement in students' mathematical abilities based on essential learning competencies.	3.38	Moderately Effective
8. Determine learner's mastery of the fundamental operations in Mathematics which shall guide teachers in developing intervention programs.	3.38	Moderately Effective
9. Assess student mastery of key standards through formative assessment.	2.77	Moderately Effective
10. Evaluate the grade level readiness of pupils.	3.38	Moderately Effective
Overall Mean	3.35	Moderately Effective

It can be portrayed from the table that with respect to monitoring and evaluation, the overall mean obtained is 3.35, verbally interpreted as Moderately Effective, with most of the items also interpreted as Moderately Effective, and only one item interpreted as Much Effective. The finding that the Rapid Mathematics Assessment Program (RMAP) is perceived by teacher-respondents as only moderately effective with respect to monitoring and evaluation suggests that while the program provides some level of support in tracking student progress and assessing instructional outcomes, there may be limitations in its consistency, comprehensiveness, or usability in this area.

It can be implied that there is a need for clearer guidelines, better tools for data interpretation, or more frequent updates to effectively monitor and evaluate student performance over time. This further implies that while RMAP is a helpful tool, its monitoring and evaluation component requires enhancement to maximize its impact. This is parallel to the statements of Holt (2021), that the purpose of evaluation and assessment is to improve student learning and performance, and therefore, students should hold a central place in the evaluation and assessment process. Students should be fully engaged with their learning and empowered to evaluate and to assess their own progress, which is also a key skill for lifelong learning.

Table 5. *Significant Difference on the Level of Effectiveness of Rapid Mathematics Assessment Program for Primary Grade Pupils as Perceived by the Teacher-Respondents with Respect to the Different Aspects in Terms of Their Profile*

Profile	*f-value*	*p-value*	*Decision*	*Verbal Interpretation*
Age				
Objectives	.410	.746	Accepted	Not Significant
Intervention Process	2.632	.052	Accepted	Not Significant
Monitoring and Evaluation	.883	.452	Accepted	Not Significant
Sex				
Objectives	.068	.794	Accepted	Not Significant
Intervention Process	2.528	.114	Accepted	Not Significant
Monitoring and Evaluation	.241	.624	Accepted	Not Significant
Civil Status				
Objectives	.558	.644	Rejected	Significant
Intervention Process	.228	.876	Accepted	Not Significant
Monitoring and Evaluation	2.465	.065	Accepted	Not Significant
Educational Attainment				
Objectives	.332	.856	Accepted	Not Significant
Intervention Process	1.302	.272	Accepted	Not Significant
Monitoring and Evaluation	2.195	.055	Accepted	Not Significant
Position Title				
Objectives	.317	.866	Accepted	Not Significant
Intervention Process	1.203	.312	Accepted	Not Significant
Monitoring and Evaluation	2.601	.058	Accepted	Not Significant
Length of Service				
Objectives	1.009	.414	Accepted	Not Significant
Intervention Process	.394	.852	Accepted	Not Significant
Monitoring and Evaluation	2.482	.055	Accepted	Not Significant
In-service Trainings Attended				
Objectives	.250	.939	Accepted	Not Significant
Intervention Process	2.049	.075	Accepted	Not Significant
Monitoring and Evaluation	1.836	.100	Accepted	Not Significant

The statistical findings reveal that there is generally no significant difference in the level of effectiveness of the Rapid Mathematics Assessment Program (RMAP) for primary grade pupils as perceived by the teacher-respondents with respect to objectives, intervention process, and monitoring and evaluation in terms of their age, sex, educational attainment, position title, length of service, and in-service trainings attended, yielded p-values more than the probability value of 0.05, thus the null hypothesis is accepted. This suggests a consistent perception among teachers of varying backgrounds regarding the effectiveness of RMAP across these three core aspects. Regardless of demographic or professional differences, teachers largely agree on the program's strengths and performance, which speaks to the program's broad applicability and relevance in the classroom setting.

However, an exception is noted under the civil status profile variable with regard to the "objectives" component of the program, where the result shows the p-value is less than .05 level of significance, thus there is a significant difference, and the null hypothesis is rejected. This indicates that teachers' perceptions of RMAP's effectiveness in achieving its objectives vary depending on their civil status. This finding may reflect differing perspectives or priorities among single, married, or otherwise categorized teachers in interpreting how well the program supports learning goals. For instance, married teachers might have more teaching experience or a more stable classroom approach, influencing their expectations and evaluations of program objectives.

This is in consonance with the findings of Paglomutan's (2022) study, which states that no significant differences exist in the extent of assessment practices of SHS mathematics teachers as assessed by the participants when grouped according to their demographic profile.

Table 6. *Level of Performance of Primary Grade Pupils as Revealed in the Pretest and Posttest Results in the Rapid Math Assessment*

Scores	*Verbal Interpretation*	*Pretest*		*Posttest*	
		f	*%*	*f*	*%*
85-100%	At Grade Level (Highly Proficient)	---	----	19	19
75-84%	Transitioning (Proficient)	12	12	29	29
50-74%	Developing (Nearly Proficient)	23	23	24	24
25-49%	Emerging (Low Proficient)	38	38	18	18
Less than 25%	Emerging (Not Proficient)	26	26	10	10
Total		100	100	100	100

It can be deduced from the findings that the shift clearly demonstrates the effectiveness of the RMAP in improving the mathematical abilities of primary grade pupils. The movement of students from the lower proficiency bands to the developing, proficient, and highly proficient levels reflects not only improved content understanding but also the positive impact of targeted assessment and intervention strategies. The program appears to help identify learning gaps early and provide appropriate instructional responses, allowing more students to meet or exceed grade-level expectations. Findings imply that the results underscore the value of incorporating diagnostic assessments like RMAP to guide differentiated instruction and track student progress. For school administrators and curriculum developers, the success of the program justifies its continued use or expansion, as well as investment in teacher training to maximize its benefits.

This is similar to the findings of Moyo (2022) that the students' achievement in mathematically HOTS items was found to be significantly improved from pre-test to post-test. Post-intervention classroom observation showed that teachers practiced the integration and implementation of some formative assessment strategies.

Table 7. *Result of the t-test on the Significant Difference Between the Level of Performance of the Primary Grade Pupils in the Rapid Mathematics Assessment as Revealed in the Pretest and Posttest Results*

Test	*t-value*	*p-value*	*Ho*	*Verbal Interpretation*
Pretest Posttest	5.763	.007	Rejected	Significant

The result of the t-test comparing the pretest and posttest scores of primary grade pupils in the Rapid Mathematics Assessment Program reveals a t-value of 5.763 and a p-value of .007, which is less than the standard significance level of 0.05. This leads to the rejection of the null hypothesis, indicating that there is a statistically significant difference between the pupils' performance before and after the implementation of the program. The significant difference indicates that pupils' mathematics performance improved after they were exposed to the Rapid Mathematics Assessment Program. The rejection of the null hypothesis confirms that the observed gains in the posttest are not due to chance, but rather attributable to the effects of the intervention, namely, the structured assessment process, targeted instruction, and timely feedback mechanisms employed during the program.

These findings imply the continued implementation and possible institutionalization of the Rapid Mathematics Assessment Program in primary grade levels. The significant improvement also underscores the importance of data-driven instruction, where pre-assessment and post-assessment results are used to guide teaching strategies. Furthermore, the results suggest a need for capacity-building programs for teachers to enhance their skills in interpreting assessment data and applying it to differentiate instruction. Finally, policymakers and educational leaders may consider scaling up similar formative assessment models to other subject areas or grade levels to boost overall learning outcomes. This is supported by the findings in the study of Acharya (2022), that there is no significant difference between the achievement score pre -test and posttest of the control group. But there is a significant difference between the achievements of the experimental group, as the score of the posttest is better than the pretest.

Table 8. *Extent of the Challenges Encountered in the Implementation of Rapid Mathematics Assessment Program*

Challenges Encountered	*Weighted Mean*	*Verbal Interpretation*	*Rank*
1. Lack of pupils' engagement and comprehension of mathematical concepts.	3.39	Sometimes	3.5
2. Teachers struggling with grading and assessment due varied learning styles	3.39	Sometimes	3.5
3. Insufficient teacher training	3.34	Sometimes	7
4. Inadequate resources	3.24	Sometimes	9
5. Lack of parents' understanding of the program	3.36	Sometimes	5.5
6. Lack of parental involvement.	3.21	Sometimes	10
7. Lack focus and understanding in Mathematics leading to copying answers or submitting incomplete work	3.48	Sometimes	2
8. Lack of understanding of fundamental mathematical concepts which affect pupils' readiness to tackle more complex topics.	3.36	Sometimes	5.5
9. Lack of interest in mathematics which impact pupils' overall engagement and performance in other subjects.	3.28	Sometimes	8
10. Mathematics anxiety among pupils.	3.54	Often	1
Overall Mean	3.36	Sometimes	

The data on the extent of challenges encountered in the implementation of the Rapid Mathematics Assessment Program (RMAP) reveals that most of the identified issues are experienced to a moderate degree, with an overall weighted mean of 3.36, verbally interpreted as Sometimes. It can be noted from the findings that the pupils sometimes encountered challenges in the implementation of the Rapid Mathematics Assessment Program. This means that even though the program is effective in its framework, implementation is affected by teacher-related capacity gaps and the need for differentiated instruction strategies.

The findings imply the need for a comprehensive support system to strengthen the implementation of RMAP. Addressing mathematics anxiety should be a priority, possibly through the integration of socio-emotional learning strategies, confidence-building activities, and stress-reduction techniques into the math curriculum. This is related to the recommendations of Kutlu (2022) that teachers should use formative assessment to support student-centered classrooms in teaching mathematics and to effectively evaluate students' mathematical competence in the learning process.

Conclusions

Based on the results of the study, the conclusions derived are the following: Teachers' age, sex, civil status, educational attainment, position title, and in-service trainings attended are not significant to the effectiveness of the Rapid Mathematics Assessment Program for primary grade pupils, and the performance of the primary grade pupils in Mathematics significantly improved after undergoing intervention activities in the Rapid Mathematics Assessment Program.

In the light of the findings, the following recommendations are hereby offered: School administrators may conduct continuous professional development on effective assessment practices, data analysis, and instructional planning based on RMAP results; school administrators may encourage parents to attend orientation programs and information drives to educate them about RMAP's purpose and how they can support at home; teachers may encourage pupils to participate in confidence-building and relaxation activities to overcome fear and anxiety related to math; pupils may engage in remedial and enrichment sessions tailored to their specific learning needs in foundational math concepts; and similar studies may be conducted considering other variables.

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