



TEACHERS' EXPERIENCES AND PERCEPTIONS ON THE INFLUENCE OF READING AND MATHEMATICS ASSESSMENT (RMA) PERFORMANCE ON THE ACADEMIC ACHIEVEMENT OF GRADE 4 PUPILS IN A RURAL ELEMENTARY SCHOOL CONTEXT

Cathyrine A. Allapitan¹, Dr. Alma Gonzales²

¹San Rafael Abajo Elementary School

cathyrine.allapitan@deped.gov.ph¹

²Northeastern College, Santiago City, Philippines

almag0400@gmail.com²

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ABSTRACT

This qualitative phenomenological study explored teachers' experiences and perceptions regarding the influence of Reading and Mathematics Assessment (RMA) performance on the academic achievement of Grade 4 pupils in a rural elementary school context. Specifically, the study examined teachers' observations on learners' literacy and numeracy performance, instructional challenges, intervention practices, and perceived relationship between RMA outcomes and classroom academic achievement. Data were gathered through semi-structured in-depth interviews with twelve purposively selected Grade 4 teachers from rural public elementary schools. Thematic analysis following Braun and Clarke's framework was utilized in analyzing the data. Findings revealed that learners' RMA performance significantly reflected their comprehension skills, numeracy competence, classroom participation, and overall academic readiness. Teachers identified difficulties related to weak reading comprehension, low numeracy skills, limited learner motivation, inconsistent parental support, and resource limitations as major factors affecting learners' academic performance. Despite these concerns, participants implemented remedial instruction, contextualized learning activities, peer-assisted learning, differentiated teaching strategies, and learner-centered interventions to improve literacy and numeracy competencies. Teachers also observed that learners who demonstrated stronger RMA performance were generally more active, confident, and academically engaged in classroom activities. The findings underscore the importance of responsive intervention programs, continuous assessment practices, and contextualized instructional support in improving learners' academic achievement in rural elementary schools.

Keywords: Reading and Mathematics Assessment, academic achievement, literacy development, numeracy skills, rural elementary schools, qualitative research, learner performance

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I. INTRODUCTION

Reading and Mathematics competencies are fundamental components of academic achievement and lifelong learning. In elementary education, literacy and numeracy skills significantly influence learners' comprehension, problem-solving abilities, classroom participation, and overall academic performance. Consequently, schools implement assessment programs such as the Reading and Mathematics Assessment (RMA) to monitor learners' foundational competencies and identify areas requiring instructional intervention and academic support.

The Reading and Mathematics Assessment serves as an important educational tool for evaluating learners' literacy and numeracy performance. Through RMA results, teachers are able to identify learners' strengths, weaknesses, and instructional needs related to reading comprehension, vocabulary development, mathematical reasoning, and problem-solving skills. Assessment outcomes also provide valuable insights regarding learners' readiness for higher-level academic tasks and classroom engagement.

In rural elementary school contexts, learners often experience educational challenges associated with limited instructional resources, insufficient literacy exposure, inconsistent parental support, and varying academic readiness. These factors may significantly affect learners' RMA performance and overall academic achievement. Consequently, teachers are expected to implement responsive instructional practices and intervention strategies that address learners' literacy and numeracy needs.

Teachers play a critical role in interpreting assessment results and designing interventions that improve learners' academic competencies. They continuously adapt instructional strategies, contextualize lessons, and provide scaffolded support to strengthen literacy and numeracy development among struggling learners. However, implementing intervention programs and addressing diverse learner needs remain instructional challenges

within rural educational settings.

Despite the increasing importance of assessment-based instruction, limited qualitative studies examine teachers' lived experiences and perceptions regarding the influence of RMA performance on learners' academic achievement in rural elementary schools. Understanding teachers' perspectives is essential in identifying instructional realities, intervention practices, and educational concerns that shape learner performance and academic development.

This study explored teachers' experiences and perceptions regarding the influence of Reading and Mathematics Assessment performance on the academic achievement of Grade 4 pupils in a rural elementary school context. Specifically, it examined teachers' observations regarding learners' literacy and numeracy performance, instructional challenges, intervention strategies, and perceived academic outcomes associated with RMA results.

Objectives of the Study

This study aimed to:

1. Explore teachers' experiences and perceptions regarding learners' Reading and Mathematics Assessment performance;
2. Examine instructional challenges affecting learners' literacy, numeracy, and academic achievement; and
3. Identify intervention practices and perceived academic outcomes associated with learners' RMA performance.

Review of Related Literature

Reading and numeracy competencies significantly influence learners' academic achievement and classroom participation. According to Allington (2020), literacy and numeracy skills serve as foundational competencies that support learners' comprehension, critical thinking, communication, and academic engagement. Learners with weak reading and mathematical skills often experience difficulties in understanding classroom instruction and completing academic tasks.

Assessment programs such as RMA provide teachers with



valuable information regarding learners' academic strengths and learning needs. Black and Wiliam (2019) emphasized that formative assessment practices improve instructional decision-making and support targeted intervention strategies that strengthen learner achievement. Research further highlights the importance of differentiated instruction, contextualized learning activities, remediation programs, and collaborative learning in improving literacy and numeracy development among struggling learners. Hattie (2020) explained that continuous assessment, timely intervention, and scaffolded instruction significantly improve learners' academic performance and classroom engagement.

Theoretical Framework

The study was anchored on Vygotsky's Social Constructivist Theory (1978), which emphasizes scaffolding, guided learning, and collaborative interaction in promoting literacy and numeracy development. The study also utilized Bloom's Mastery Learning Theory (1968), which explains that learners achieve better academic outcomes when instructional support and interventions are provided according to individual learning needs.

These theories guided the exploration of teachers' perceptions, intervention practices, and academic observations related to Reading and Mathematics Assessment performance.

II. METHODOLOGY

This study employed a qualitative phenomenological research design to explore teachers' lived experiences and perceptions regarding the influence of Reading and Mathematics Assessment performance on the academic achievement of Grade 4 pupils in a rural elementary school context. Phenomenology was appropriate because it enabled the researcher to understand teachers' instructional experiences, assessment-related observations, and perceptions regarding literacy and numeracy development among learners.

The participants consisted of twelve purposively selected Grade 4 teachers from rural public elementary schools. Inclusion criteria required participants to: (1) currently

teach Grade 4 learners; (2) directly utilize or interpret Reading and Mathematics Assessment results; and (3) be willing to share their instructional experiences and perceptions related to learners' academic performance.

Data were gathered through semi-structured in-depth interviews focusing on learners' literacy and numeracy performance, instructional challenges, intervention practices, and perceived academic outcomes associated with RMA results. Ethical considerations including informed consent, confidentiality, anonymity, and voluntary participation were strictly observed throughout the conduct of the study.

The gathered data were analyzed using Braun and Clarke's (2006) thematic analysis framework. Interview transcripts were transcribed, coded, and categorized to identify recurring patterns, meanings, and themes related to learners' RMA performance and academic achievement. Trustworthiness was established through member checking, triangulation, audit trails, and thick description.

III. RESULTS AND DISCUSSION

Theme 1: Recognizing Reading and Numeracy Difficulties as Barriers to Academic Achievement

Participants consistently identified poor reading comprehension and weak numeracy skills as major barriers affecting learners' academic achievement and classroom participation. Teachers observed that learners who struggled in Reading and Mathematics Assessment (RMA) activities often experienced difficulty understanding classroom instruction, following written directions, solving mathematical problems, and participating actively during lessons. Participants emphasized that literacy and numeracy difficulties affected not only learners' performance in English and Mathematics but also their understanding of other subject areas.

One participant shared:

"Kapag mahina ang reading comprehension ng learners, naapektuhan pati performance nila sa ibang subjects."

Another teacher explained:

"May mga learners na hirap sa basic numeracy kaya nahihirapan silang sumabay sa Math lessons."

Teachers also observed that learners with weak literacy and



numeracy foundations often struggled in analyzing “Kapag contextualized ang lesson, mas naiintindihan nila questions, interpreting instructions, and completing ang concepts.”

classroom tasks independently. Participants noted that some learners became passive during classroom discussions because of fear of making mistakes or inability to understand lesson concepts.

One participant remarked:

“Kapag hindi nila naiintindihan ang binabasa, hirap silang sumagot kahit alam naman nila ang lesson.”

Another teacher stated:

“May learners na takot mag-participate kasi mababa ang confidence nila sa reading at Math.”

Participants further emphasized that low RMA performance often reflected learners’ lack of academic readiness and foundational skills necessary for higher-level learning tasks. Teachers explained that struggling learners required additional guidance, repetition of lessons, and scaffolded support before they could fully understand classroom instruction.

The findings suggest that learners’ RMA performance significantly reflects their academic readiness, classroom engagement, and foundational literacy and numeracy competencies. These findings support Allington (2020), who emphasized that weak literacy and numeracy skills significantly influence learners’ comprehension, participation, and academic achievement. Similarly, Hattie (2020) explained that foundational reading and mathematical competencies strongly affect learners’ classroom engagement and overall academic performance.

Theme 2: Implementing Contextualized and Differentiated Intervention Strategies

Teachers emphasized the importance of contextualized instruction, remediation activities, peer-assisted learning, scaffolded instruction, and differentiated teaching strategies in improving learners’ literacy and numeracy competencies. Participants explained that modifying classroom activities according to learners’ ability levels strengthened comprehension, participation, and academic engagement.

One participant stated:

“Nag-aadjust kami ng activities depende sa level ng learners.”

Another teacher remarked:

Participants described utilizing simplified instructional materials, localized examples, reading drills, guided practice, manipulatives, and collaborative learning activities to strengthen learners’ understanding of reading and mathematical concepts. Teachers observed that learners became more engaged when lessons were connected to familiar situations and real-life experiences.

One participant explained:

“Mas natututo ang learners kapag relatable at simple ang examples na ginagamit.”

Another teacher shared:

“Kapag may hands-on activities at visuals, mas nagiging active sila sa learning process.”

Participants also highlighted the effectiveness of peer-assisted learning and collaborative classroom activities in improving learner confidence and participation. Teachers explained that struggling learners became more comfortable participating when classmates provided support and encouragement during activities.

One participant remarked:

“Nakakatulong ang peer tutoring kasi mas nagiging cooperative at confident ang learners.”

Teachers further emphasized the importance of continuous remediation and differentiated support for learners with persistent literacy and numeracy difficulties.

The findings highlight the importance of responsive, contextualized, and learner-centered intervention practices in supporting academic achievement and improving RMA-related competencies. These findings align with Vygotsky’s Social Constructivist Theory, which emphasizes guided learning, scaffolding, and collaborative interaction in promoting learner development. Similarly, Tomlinson (2019) emphasized that differentiated instruction improves participation and comprehension among learners with varying academic needs. Research by Black and Wiliam (2019) further revealed that assessment-informed intervention strategies positively influence learner achievement and classroom engagement.

Theme 3: Experiencing Challenges Related to Motivation, Attendance, and Parental Support

Participants identified low learner motivation, irregular



attendance, weak study habits, and limited parental learners.

involvement as major factors affecting learners' academic performance and RMA outcomes. Teachers explained that some learners lacked consistent academic support at home, which negatively influenced literacy and numeracy development.

One participant shared:

"Minsan mabagal ang improvement dahil kulang ang support sa bahay."

Another teacher explained:

"Kapag irregular ang attendance, naapektuhan ang learning continuity nila."

Participants observed that learners with poor attendance frequently missed instructional discussions, guided practice activities, and intervention sessions necessary for improving reading and mathematical competencies.

Teachers also noted that some learners demonstrated low confidence and reduced motivation because of repeated academic struggles.

One participant remarked:

"May mga learners na nawawalan ng gana kasi nahihirapan sila sa lessons."

Another teacher stated:

"Kapag walang follow-up sa bahay, mas mabagal ang progress nila."

Participants further explained that some parents had limited time or resources to provide academic support due to work responsibilities and socioeconomic concerns. Teachers emphasized that parental involvement played a significant role in sustaining learners' motivation and academic improvement.

One participant shared:

"Kapag supportive ang parents, mas motivated at mas mabilis matuto ang learners."

The findings indicate that home environment, parental involvement, learner motivation, and attendance significantly influence literacy, numeracy, and academic achievement. These findings support Epstein's Theory of School-Family Partnership, which emphasizes the importance of parental involvement in improving learners' academic outcomes and educational engagement.

Similarly, Snowling and Hulme (2021) noted that learner motivation and family support significantly affect literacy recovery and academic participation among struggling

Theme 4: Observing Positive Academic Changes Through Continuous Assessment and Intervention

Teachers observed gradual improvements in learners' classroom participation, reading fluency, comprehension skills, mathematical reasoning, and confidence as a result of continuous intervention and assessment practices. Participants emphasized that learners who showed improvement in RMA performance also demonstrated better academic engagement, classroom interaction, and willingness to participate during lessons.

One participant remarked:

"Kapag nag-improve ang reading at Math skills nila, mas nagiging active sila sa klase."

Another teacher stated:

"Nakikita naming mas confident ang learners kapag nakakasagot na sila nang tama."

Participants explained that continuous remediation activities, scaffolded instruction, guided practice, and positive reinforcement contributed significantly to learners' academic progress. Teachers observed that learners gradually became more confident in answering questions, participating in discussions, and completing classroom activities independently.

One participant explained:

"Unti-unti silang nagiging independent kapag tuloy-tuloy ang intervention at practice."

Another teacher shared:

"Kapag nakikita nilang kaya nila ang activities, mas na-engganyo silang mag-aral."

Participants also highlighted that continuous assessment enabled teachers to monitor learner progress, identify persistent difficulties, and adjust instructional strategies according to learners' needs. Teachers viewed assessment not only as an evaluation tool but also as an instructional process that guided intervention planning and learner support.

One participant remarked:

"Malaking tulong ang assessment para makita kung saan pa kailangan ng intervention."

The findings suggest that continuous intervention and assessment practices positively influence learners' academic achievement, literacy and numeracy



development, classroom participation, and confidence. These findings support Bloom's Mastery Learning Theory, which explains that learners achieve better academic outcomes when provided with timely intervention and individualized instructional support. Similarly, Hattie (2020) emphasized that continuous feedback, assessment, and scaffolded instruction significantly improve learner achievement and academic engagement. Research by Black and Wiliam (2019) further revealed that formative assessment and intervention practices positively influence learner progress and classroom performance.

Discussion

The findings revealed that learners' Reading and Mathematics Assessment performance significantly influences academic achievement, classroom participation, and learner confidence among Grade 4 pupils in rural elementary school contexts. Weak literacy and numeracy competencies were perceived as major barriers affecting comprehension, problem-solving, and academic engagement.

Despite these instructional challenges, teachers demonstrated pedagogical adaptability through contextualized instruction, differentiated remediation activities, peer-assisted learning, scaffolded teaching, and continuous intervention practices. Participants further emphasized the importance of parental support, learner motivation, and responsive instructional practices in improving literacy and numeracy performance.

The study highlights the importance of assessment-informed instruction and learner-centered intervention programs in strengthening academic achievement and foundational competencies among elementary learners.

IV. CONCLUSION

The study concluded that Reading and Mathematics Assessment performance significantly reflects learners' literacy, numeracy, and academic readiness among Grade 4 pupils in rural elementary schools. Learners who demonstrated weak RMA performance often experienced difficulties in comprehension, problem-solving, classroom participation, and academic engagement.

Despite these concerns, teachers demonstrated

instructional adaptability through differentiated instruction, remediation activities, contextualized teaching, peer-assisted learning, and scaffolded intervention practices. Continuous assessment and responsive instructional support positively influenced learners' confidence, classroom participation, and academic improvement.

The findings underscore the importance of strengthening literacy and numeracy intervention programs, assessment-informed teaching practices, parental involvement initiatives, and learner-centered instructional support systems in improving academic achievement among elementary learners.

Implications of the Study

The findings may guide school administrators, literacy and numeracy coordinators, and policymakers in strengthening Reading and Mathematics intervention programs, contextualized instructional practices, and assessment-based support systems for elementary learners in rural schools. Schools may also enhance parental involvement initiatives and collaborative learning programs that promote literacy and numeracy development.

The study further highlights the importance of continuous assessment, differentiated instruction, and responsive intervention strategies in improving learners' academic performance and foundational competencies.

Future studies may further examine the long-term effects of RMA-based intervention programs on learners' academic achievement across diverse educational contexts.

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