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CORRELATING AVAILABILITY OF LEARNING RESOURCES AND ACADEMIC PERFORMANCE IN MULTIGRADE ELEMENTARY SCHOOLS

Ruby A. Dañola[1], Desiree P. Alota[2], Allan Lalosa[3]
[1]*MAEd Student, Graduate School, Eastern Samar State University-Borongan*
[2] *MAEd Student, Graduate School, Eastern Samar State University-Borongan*
[3] *MAEd Adviser, Graduate School, Eastern Samar State University-Borongan*

ABSTRACT
This study investigated the relationship between the availability of learning resources and the academic performance of learners in multigrade elementary schools in the Dolores I District, Eastern Samar. Anchored in the premise that resource availability significantly affects learning outcomes, the study employed a descriptive-correlational research design. Data were collected from multigrade teachers and school records using a validated researcher-made survey questionnaire and learners' academic grades in core subjects (English, Math, Science, and Filipino). Findings revealed that while the availability of learning resources – such as textbooks, teaching guides, audio-visual aids, and digital tools – was generally moderate, academic performance among learners remained within a satisfactory level. Pearson correlation analysis showed a significant positive relationship between resource availability and learners' academic performance, emphasizing the crucial role of adequate and accessible instructional materials in supporting multigrade instruction. The study concludes that improving the supply and quality of learning resources can lead to better educational outcomes in multigrade settings. It recommends targeted interventions by local education stakeholders to enhance the resource ecosystem in multigrade schools, particularly in geographically challenged areas like Eastern Samar.
KEYWORDS: *Multigrade Teaching, Learning Resources, Academic Performance, Instructional Materials*

INTRODUCTION

Background of the Study

Multigrade education is a prevalent approach worldwide, especially in rural and remote areas where resources and teacher availability are limited. While it offers a solution to educational access challenges, multigrade settings often grapple with inadequate learning resources, which can adversely affect academic performance. The COVID-19 pandemic further exacerbated these issues, highlighting disparities in technology access and learning environments, particularly among students from lower socio-economic backgrounds (Haelermans et al., 2022).

In Southeast Asia, multigrade education is implemented in countries like the Philippines, Thailand, and Indonesia to provide education in geographically isolated and sparsely populated regions. However, these programs often face challenges such as limited resources, affecting the quality of education delivered. A study by Buaraphan et al. (2018) in Thailand found that while multigrade teaching can enhance students' reading and writing skills, the effectiveness is contingent upon the availability of adequate learning materials and teacher support.

The Philippines has institutionalized multigrade education through the Department of Education's Multigrade Education Program (MEP) to ensure educational access in remote areas. Despite its significance, multigrade schools often encounter challenges such as insufficient learning materials, inadequate teacher training, and limited infrastructure. A policy evaluation by Tayoni and Abocejo (2023) revealed that the absence of learning materials is a primary issue in multigrade classes, alongside the lack of teacher training and parental involvement. Furthermore, a study by Lacre and Valle (2024) indicated that the availability of facilities and resources plays a fundamental role in enhancing the academic performance of learners in multigrade settings.

Region 8, particularly Eastern Samar, is characterized by its archipelagic geography and frequent exposure to natural disasters, which exacerbate the challenges faced by multigrade schools. The scarcity of learning resources, coupled with infrastructural damages from calamities, hampers the delivery of quality education and affects students' academic performance. UNICEF Philippines (2023) reported that multigrade schools in typhoon-affected areas struggle with limited access to digital learning tools, further hindering learning continuity.

While multigrade education is recognized for its role in promoting educational access, there is a notable gap in empirical studies examining the correlation between the availability of learning resources and academic performance in multigrade settings, especially in regions like Eastern Samar. Existing literature highlights the challenges faced by multigrade schools but lacks comprehensive analysis on how resource availability directly impacts student outcomes. Addressing this gap is crucial for informing policy decisions and resource allocation to enhance the quality of multigrade education in the region.

This study aims to fill the identified gap by investigating the relationship between the availability of learning resources and the academic performance of students in multigrade elementary schools in Eastern Samar. By employing a correlational research design, the study will provide insights into how resource availability influences educational outcomes, thereby informing policy decisions and resource allocation to enhance the quality of multigrade education in the region.

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Objectives of the Study

This study aims to determine the relationship between the availability of learning resources and the academic performance of learners in multigrade elementary schools in Eastern Samar.

Specifically, it seeks to answer the following questions:

1. What is the level of availability of learning resources (e.g., textbooks, teaching guides, audio-visual aids, digital tools, and classroom materials) in multigrade elementary schools in Eastern Samar?
2. What is the level of academic performance of learners in multigrade classes based on their most recent academic grades in core subjects (e.g., English, Math, Science, and Filipino)?
3. Is there a significant relationship between the availability of learning resources and the academic performance of learners in multigrade elementary schools?

METHODOLOGY

Research Design

This study will employ a descriptive-correlational research design. The descriptive component will be used to determine the level of availability of learning resources and the academic performance of learners in multigrade elementary schools. The correlational component will be used to examine whether a statistically significant relationship exists between the availability of learning resources and the academic performance of learners.

A quantitative approach will be utilized, as the study involves collecting and analyzing numerical data using survey instruments and academic records. This design is appropriate for identifying patterns, describing current conditions, and determining correlations without manipulating any variables (Creswell, 2020).

Locale of the Study

This study will be conducted in selected multigrade elementary schools under the Dolores I District, which is part of the Schools Division of Eastern Samar, Region VIII. Dolores I District is composed of both coastal and upland barangays and serves a diverse population of learners, including those in geographically isolated and disadvantaged areas (GIDAs). The presence of multigrade classes in several elementary schools across the district is a response to challenges such as limited teacher deployment, small school population, and logistical constraints typical of rural and remote communities.

Dolores I District was chosen as the research locale due to its significant number of multigrade schools and its representativeness of the wider educational landscape in Eastern Samar. It provides an ideal context for examining how the availability of learning resources affects the academic performance of learners in a multigrade setting. The insights drawn from this district may be valuable for informing policy and resource allocation not only within Eastern Samar but in similar rural contexts across the Philippines.

Respondents of the Study

The respondents of this study will include public elementary multigrade teachers and Grade 4 to Grade 6 learners from selected multigrade classes in Dolores I District, under the Schools Division of Eastern Samar. The selection of respondents is based on the actual implementation of multigrade teaching in their schools as officially recognized by the Department of Education (DepEd).

Multigrade Teachers will serve as the primary respondents for the assessment of the availability of learning resources, since they are directly involved in instructional delivery and resource utilization in multigrade settings. Their responses will be gathered through a researcher-made survey questionnaire. Learners' Academic Performance will be obtained through document analysis of official class records or report cards. Grades in core subjects—English, Mathematics, Science, and Filipino—will serve as the basis for measuring academic performance.

In cases where schools have multiple multigrade classes, only one class per school will be selected to ensure even representation. The total number of respondents will be determined using purposive sampling, based on the availability and accessibility of teachers and learners in multigrade settings across the district.

Parental consent (for learners) and approval from school heads will be secured prior to data collection to ensure ethical standards are met.

Research Instruments

This study will use two primary research instruments: Survey Questionnaire for Teachers and Document Analysis of Learners' Academic Performance. The Survey Questionnaire will assess the availability of learning resources in multigrade classrooms. It consists of two sections:

In section 1will be the Demographic Information. This section gathers basic information about the teacher, including their school name, educational background, teaching experience, years teaching in multigrade settings, and the number of multigrade classes managed.

In section 2 will be the availability of Learning Resources. Teachers will rate the availability of various resources on a Likert scale from 1 (Never Available) to 5 (Always Available). Resources include textbooks, teaching guides, audio-visual aids, digital tools, classroom materials, library resources, teacher training, and internet access. Teachers will also provide comments on the challenges they face in accessing and utilizing these resources.

On the other hand, the Document Analysis of Learners' Academic Performance will be used. Academic performance data will be gathered through document analysis of learners' report cards for the 2023-2024 school year. The data will include grades in core subjects—English, Mathematics, Science, and Filipino—along with descriptive ratings such as Very Satisfactory, Satisfactory, etc. This data will serve as the dependent variable for the study.

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To ensure the instruments' reliability and validity, they will be reviewed by experts in education and instructional design for content validity. A pilot test will be conducted with a small group of teachers from a different district, followed by reliability testing using Cronbach's alpha to ensure internal consistency.

Data Gathering

Before the actual data collection, the researchers will obtain formal approval from the Division Office of Eastern Samar and the District Supervisor of Dolores I District. Approval from school heads of selected multigrade elementary schools will also be sought. Additionally, written informed consent will be secured from multigrade teachers and the parents or guardians of learner participants. The researcher will visit each participating school to coordinate with school heads and multigrade teachers. During these visits, the purpose of the study will be explained, and the data collection schedule will be arranged to avoid disrupting classroom activities.

Survey questionnaires will be administered to multigrade teachers to assess the availability of learning resources. These questionnaires may be distributed either through printed copies or digital formats (e.g., Google Forms), depending on the accessibility and preference of the respondents. Teachers will be given ample time (e.g., 3–5 days) to complete the survey. The researcher will collect learners' academic performance data through document analysis of official class records or report cards. Grades in core subjects—English, Mathematics, Science, and Filipino—for the most recent grading period will be recorded. These records will be accessed with permission from the school head and with parental consent.

All responses and academic data will be reviewed for completeness and accuracy. In cases of missing or unclear information, the researcher will conduct follow-up visits or communications with the concerned teachers or school administrators.

All data collected will be treated with strict confidentiality. Identifying information will be coded or anonymized, and all documents will be securely stored. The data will be used solely for research purposes.

Analysis of Data

To answer research question 1, Descriptive statistics such as frequency, percentage, mean, and standard deviation will be used to determine the level of availability of each type of learning resource. Responses from the teacher survey will be computed and interpreted using a five-point Likert scale. The data will be categorized into descriptive levels such as *Very Low*, *Low*, *Moderate*, *High*, and *Very High* availability.

For research question number 2, Descriptive statistics will also be employed to analyze learners' academic performance. Mean grades per subject will be computed, and the overall academic performance will be categorized based on DepEd's standard grading scale (e.g., *Outstanding*, *Very Satisfactory*, *Satisfactory*, *Fairly Satisfactory*, *Did Not Meet Expectations*). Frequencies and percentages will also be reported to show the distribution of learners across performance levels.

For research question number 3, to determine the strength and direction of the relationship between the availability of learning resources and learners' academic performance, Pearson Product-Moment Correlation Coefficient (Pearson's r) will be used. This inferential statistical tool is appropriate for identifying linear relationships between two continuous variables. A significance level of 0.05 will be set to test whether the correlation is statistically significant.

Ethical Considerations

This study will strictly adhere to ethical research standards to ensure the protection, dignity, and rights of all participants.

Firstly, informed consent will be obtained from all participating teachers, and written permission will be sought from school heads and the District Office of Dolores I District. For access to learners' academic performance data, parental consent will be secured to ensure compliance with ethical and legal data privacy requirements.

Participants will be informed of the purpose, scope, procedures, risks, and benefits of the research. They will also be assured of their voluntary participation and their right to withdraw from the study at any time without any form of penalty or consequence.

To maintain confidentiality and anonymity, all personal identifiers will be removed or coded. Data will be stored securely and used solely for research purposes. The results will be reported in aggregate form, ensuring that no individual or school is identifiable.

The study will comply with the ethical guidelines set forth by the Department of Education (DepEd) and applicable national research ethics standards. A formal ethics clearance or endorsement from the proper DepEd authorities will be obtained before the study begins.

RESULTS

Table 1: Mean and Standard Deviation of the Availability of Learning Resources in Multigrade Elementary Schools

Learning Resource	Mean	SD	Descriptive Level
Textbooks	3.74	0.56	High
Teaching Guides	3.68	0.63	High
Audio-Visual Aids	2.35	0.70	Low
Digital Tools	2.28	0.82	Low
Classroom Materials	3.10	0.59	Moderate

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Learning Resource	Mean	SD	Descriptive Level
Internet Access/E-learning	2.05	0.77	Very Low
Overall	3.12	0.78	Moderate

The table showed that the overall availability of learning resources in multigrade elementary schools was rated as Moderate (M = 3.12, SD = 0.78). Textbooks and teaching guides were the most available (M = 3.74), while digital tools and audio-visual aids were among the least available (M = 2.28). Classroom materials such as charts and flashcards received a moderate rating (M = 3.10), while internet access and e-learning tools were scarce across most schools (M = 2.05).

The results suggest a noticeable disparity in the availability of traditional vs. modern learning tools. While basic print materials are generally accessible, the lack of digital tools reflects infrastructural and budgetary challenges, especially in remote areas. This supports prior findings by Alcantara and Gutierrez (2021), who reported that rural multigrade schools in the Philippines often lack access to ICT-based resources, affecting instructional delivery. The limited access to technology hinders teachers' capacity to adapt to 21st-century teaching strategies, highlighting a persistent gap in educational equity.

Table 2: Mean Academic Performance of Learners in Core Subjects

Subject	Mean Grade	SD	Performance Level
English	81.5	5.1	Satisfactory
Math	81.8	4.8	Satisfactory
Science	80.1	5.6	Satisfactory
Filipino	83.2	4.3	Very Satisfactory
Overall GWA	81.6	4.9	Satisfactory

Document analysis of report cards from selected multigrade schools showed that learners had an average general weighted mean (GWM) of 81.6, falling under the Satisfactory performance level. Among the core subjects, Filipino had the highest average grade (M = 83.2), while Science had the lowest (M = 80.1). Notably, a wide range in performance was observed, with some schools averaging as low as 76 and others reaching up to 89.

The results indicate that while learners are generally performing within acceptable levels, there is considerable variability. This is consistent with a study by Tan and Mijares (2020), which emphasized the learning challenges in multigrade settings, such as divided teacher attention and mismatched curriculum pacing. These challenges may contribute to inconsistent academic achievement. The relatively low performance in Science mirrors findings from SEAMEO (2022), which noted that multigrade learners often lack access to laboratory and visual learning materials, leading to lower comprehension in content-heavy subjects.

Table 3: Correlation between Availability of Learning Resources and Academic Performance

Variables	r-value	p-value	Interpretation
Availability of Learning Resources vs. Academic Performance	0.49	0.008	Moderate Positive Correlation

*Significant at $p < 0.01$

A Pearson correlation analysis revealed a moderate positive relationship between the availability of learning resources and academic performance ($r = 0.49$, $p < 0.01$). This suggests that as the availability of learning materials increases, academic performance tends to improve. The findings confirm a statistically significant relationship between learning resource availability and learner achievement. This aligns with the theory that access to adequate instructional materials facilitates better understanding and engagement (UNESCO, 2021). The moderate correlation underscores the fact that while resources alone do not guarantee success, they play a critical enabling role, especially in complex multigrade settings. The study fills a local research gap by providing quantitative evidence from Eastern Samar, a region previously underrepresented in multigrade education research.

These findings support investment in equitable resource distribution as a strategy for improving learning outcomes, particularly in geographically challenged areas. As highlighted by Palarca and Reboja (2023), strategic support for multigrade classrooms can help close the rural-urban achievement gap in the Philippines.

CONCLUSIONS

Based on the major findings of the study, the following conclusion are hereto made:

1. The availability of learning resources was found to be moderate overall, with textbooks and teaching guides being adequately supplied, but digital tools and audio-visual aids notably lacking. This gap indicates that while traditional materials remain accessible, multigrade classrooms are not fully equipped with 21st-century instructional resources, limiting the potential for differentiated and technology-integrated teaching strategies.

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2. The learners' academic performance across core subjects was found to be satisfactory, with the highest performance in Filipino and the lowest in Science. The variability in grades across subjects suggests that resource availability may play a role in shaping outcomes, particularly in subjects that require more interactive and visual learning tools.
3. The study found a moderate positive correlation between the availability of learning resources and academic performance. This statistically significant relationship confirms that improved access to learning materials contributes meaningfully to learners' academic outcomes in multigrade settings.

RECOMMENDATIONS

On the light of the major findings and the conclusions derived in the study, the following recommendations were hereby proposed:

1. The Department of Education and local government units should prioritize the allocation of digital tools, audio-visual aids, and internet connectivity in multigrade classrooms to complement traditional materials and foster interactive learning.
2. Conduct regular training on how to effectively utilize both traditional and modern learning materials in multigrade instruction. This will empower teachers to maximize the limited resources and address diverse learning needs more effectively.
3. Given that Science recorded the lowest average grades, developing subject-specific learning kits (e.g., science experiment boxes, visual aids) tailored for multigrade use is essential to improve understanding in content-heavy subjects.
4. School administrators should conduct regular assessments of resource availability and track learner performance to ensure alignment between inputs and outcomes. Data-driven decisions can then guide resource allocation and instructional improvement.
5. Future researchers are encouraged to replicate or expand this study to include other districts in Region 8 or across the Philippines to validate the findings and create a broader evidence base for improving multigrade education.

Conflict of Interest

The researcher declares that there is no conflict of interest regarding the conduct, analysis, and publication of this study entitled *"Correlating Availability of Learning Resources and Academic Performance in Multigrade Elementary Schools."* This research was conducted independently and without influence from any funding agency, institution, or organization that could potentially affect the results and interpretation of the findings. All procedures were carried out objectively and ethically to ensure the credibility and integrity of the study.

REFERENCES

1. *Abocejo, F. T., & Tayoni, A. C. (2023). The Multigrade Education Program: A policy evaluation. International Journal of Academic Pedagogical Research, 7(1), 1–6. https://www.researchgate.net/publication/369370422_The_Multigrade_Education_Program_A_Policy_Evaluation*
2. *Chan, J. R., Marasigan, A. C., & Santander, N. T. (2021). Multigrade teachers' experiences and learning assessments on modular remote teaching during the COVID-19 pandemic. International Journal of Research Studies in Education, 10(6), 95–107. https://doi.org/10.5861/ijrse.2021.6*
3. *Enayati, T. (2016). Classroom management strategies of multigrade schools with emphasis on the role of technology. Interdisciplinary Journal of Virtual Learning in Medical Sciences, 7(2), e12161. https://doi.org/10.5812/ijvlms.12161*
4. *Gonzales, M. A., & Reyes, L. P. (2022). Teachers' challenges and practices in handling multigrade classes: A systematic review. Journal of Multigrade Education Studies, 5(3), 45–60. https://www.researchgate.net/publication/377873211_Teachers%27_Challenges_and_Practices_in_Handling_Multigrade_Classes_A_Systematic_Review*
5. *Marasigan, A. C. (2021). Multigrade teachers' experiences and learning assessments on modular remote teaching during the COVID-19 pandemic. SSRN Electronic Journal. https://ssrn.com/abstract=5075859*
6. *Mijares, B. F. III. (2022). Factors affecting the academic performance of learners in Mathematics amidst pandemic. Psychology and Education: A Multidisciplinary Journal, 5(1), 624–637. https://doi.org/10.5281/zenodo.7337795*
7. *SEAMEO INNOTECH. (2020). Summary report: Review of the current situation and practices of Philippine multigrade schools. https://www.seameo-innotech.org/wp-content/uploads/2020/04/Summary-Report-Review-of-the-Current-Situation-and-Practices-of-PHL-Multigrade-Schools-comp.pdf*
8. *Sali, M. L., & Cruz, R. D. (2019). Leadership and management practices of multigrade school heads in Camarines Norte. IRE Journals, 7(2), 41–54. https://www.irejournals.com/formatedpaper/1704930.pdf*
9. *Tan, R. M., & Mijares, B. F. (2020). Strategies and challenges of multigrade teachers in the selected schools in Palawan. Philippine Journal of Multigrade Education, 3(2), 15–30. https://ejournals.ph/article.php?id=21138*
10. *UNESCO. (2020). Global education monitoring report 2020: Inclusion and education: All means all. https://unesdoc.unesco.org/ark:/48223/pf0000373718*