



Multigrade Teaching Practices: Basis for a Sustainability Plan

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ABSTRACT

This descriptive study evaluated the level of multigrade teaching practices in the first congressional districts of a large division in the Negros Island Region for the school year 2025–2026 ($N = 32$ public classroom teachers via total enumeration) to establish an empirical basis for a sustainability plan. The primary objectives were to evaluate the level of multigrade teaching practices across instructional strategies, classroom management, and assessment; analyze differences by teacher profile variables (age, educational attainment, length of service, and number of training sessions attended); and design a targeted intervention plan. Anchored on David Johnson's (1989) Cooperative Learning Theory, this research directly advances Sustainable Development Goal (SDG) 4 (Quality Education) by validating localized pedagogical approaches that ensure equitable access in remote, geographically isolated communities. Data were gathered using a content-validated, researcher-developed questionnaire (Validity Index = 4.83), which demonstrated high reliability (Cronbach's Alpha = 0.932) on a 5-point Likert scale. Descriptive statistics revealed very high execution across all core dimensions: classroom management ($M = 4.79$), assessment ($M = 4.65$), and instructional strategies ($M = 4.62$). Mann-Whitney U tests indicated no significant differences across age, educational attainment, or length of service ($p > 0.05$). However, significant differences were identified in the number of training sessions attended for both instructional strategies ($U = 61.50, p = 0.011$) and assessment ($U = 75.00, p = 0.040$), indicating that targeted professional development directly dictates technical execution. Specific operational gaps were identified in game-based instruction ($M = 4.50$) and learner self-assessment ($M = 4.44$). To sustain high-level performance, a proposed sustainability plan that focuses on game-based tools, classroom discipline reorientation, and self-assessment frameworks is presented.

Keywords: Academic performance, assessment, classroom management, instructional strategies, multigrade teaching practices

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INTRODUCTION

Education is recognized by the United Nations as a fundamental human right, codified in the Universal Declaration of Human Rights and operationalized globally through Sustainable Development Goal 4 (SDG 4: Quality Education). In the Philippine context, Article XIV of the 1987 Philippine Constitution mandates that the state establish and maintain a system of free public education at the elementary and high school levels. This constitutional commitment is reinforced by Republic Act 9155, otherwise known as the Governance of Basic Education Act of 2001 (Albert et al., 2023).

To fulfill this mandate in Geographically Isolated and Disadvantaged Areas (GIDAs) where student enrollment is insufficient to organize traditional mono-grade classes, the Department of Education (DepEd) implements Multigrade (MG) teaching. Multigrade instruction is an essential DepEd policy mechanism that democratizes access to quality basic education in remote communities, despite geographical barriers, limited physical infrastructure, and varying levels of learner readiness (Ignacio & Malonzo, 2025; Tayoni & Abocejo, 2023).

Despite their vital socio-educational role, multigrade classrooms present distinct pedagogical and administrative complexities. Teachers in multigrade settings simultaneously teach multiple grade levels in a single room, requiring advanced instructional preparation, structured behavioral management, and differentiated assessment strategies (Daga, 2021). Active multigrade teacher-practitioners face persistent hurdles, including insufficient contextualized learning materials, heavy administrative workloads, time constraints, and inadequate specialized training (Naparan & Castañeda, 2021). Addressing these operational challenges requires empirical baseline evaluation to formulate evidence-based, sustainable interventions.

OBJECTIVES OF THE STUDY

This study aimed to determine the level of multigrade teaching practices in the first congressional districts of a large division in Negros Island Region for the school year 2025-2026 as a basis for a sustainability plan. Specifically, it sought to answer the following questions: 1) level of multigrade teaching practices according to instructional strategies, classroom management, and assessment; 2) level of multigrade teaching practices when grouped according to age, educational attainment, length of service, and number of trainings attended; 3) the significant difference in the level of multigrade teaching practices when grouped and compared according to the aforementioned variables; and 4) formulate a contextualized sustainability plan for SY 2026–2027 to address identified operational deficiencies and strengthen long-term instructional delivery.

LITERATURE REVIEW

The review of related literature encompasses both foreign and local studies that detail the conceptual foundations and empirical findings on multigrade instruction across its primary dimensions.

Instructional Strategies in Multigrade Contexts

Effective multigrade delivery relies heavily on differentiated instruction, flexible grouping, and active learning methodologies (Hawes & Placier, 2018). Kim (2020) demonstrated that flexible grouping significantly improves academic resilience and achievement among low-performing students. Technology integration, interactive media, and experiential learning enhance pupil engagement without creating classroom distractions (Canales, 2020; Kryukov & Gorin, 2017). Locally, Abarquez et al. (2025) emphasized that Philippine multigrade classrooms require creative, progressive pedagogical adaptations rather than rigid monograde routines. Furthermore, Castañeda (2023) and Evangelio and Escote (2024) confirmed a strong positive relationship between instructional delivery competence and formal professional training.

Classroom Management and Physical Environment

Managing a multigrade classroom requires specialized routines to structure transitions, enforce preventive discipline, and minimize instructional loss (Jouti, 2020; Lacre & Valle, 2024). Erden (2020) noted that creating a safe, inclusive environment is paramount when children of diverse ages share one physical space. However, resource scarcity poses a continuous challenge; Msimanga (2019) and Naparan and Castañeda (2021) observed that multigrade teachers frequently experience material shortages, leading them to incur personal expenses to purchase basic learning aids (Costigador, 2019). Studies by Sanoy (2020) and Tanjusay (2019) highlighted that mature teacher with longer tenure often demonstrate superior behavioral management skills.

Assessment Strategies and Evaluative Feedback

Assessment in multigrade settings must be continuous and differentiated to reflect distinct grade-level competencies (Umar, 2018). Kalender and Erdem (2021) and Taole (2022) revealed that dividing evaluative time among multiple grades represents one of the most taxing responsibilities for multigrade teachers. Locally, Daga (2021) identified widespread challenges in



designing differentiated scoring criteria due to a lack of specialized psychometric training. Additionally, Recta and Potane (2023) found that teachers rarely implement learner self-assessment because young elementary pupils possess limited reflective capacities.

Synthesis and Research Gap

While international and national literature thoroughly documents the broad challenges of multigrade teaching, empirical gaps remain regarding localized, objective behavioral mapping across public school divisions in the Negros Island Region. This study directly addresses this gap by linking demographic indicators to empirical performance metrics to develop a data-grounded administrative sustainability plan.

METHODOLOGY

Research Design

This study employed a descriptive research design to systematically evaluate the level of multigrade teaching practices within the first congressional districts of a large division in the Negros Island Region for the school year 2025–2026, serving as the empirical foundation for a sustainability plan. As articulated by Creswell and Poth (2019), a descriptive approach is uniquely engineered to identify, describe, and map the specific characteristics and behaviors of a sample population to shed light on current educational issues. This design is highly suitable for this investigation because it provides a comprehensive understanding of operational realities, enabling the researcher to effectively analyze data and make precise professional judgments and recommendations based on specific localized characteristics.

Locale of the Study

This research was undertaken in the public elementary schools with multigrade classes in the first congressional districts of a big division in Negros Island Region composed of six municipalities, having 42,660 learners and 1,266 teachers. Within the said division, the research focused on Bindoy District II, since the clustered and self-contained local public school arrangement herein serves as an accurate microcosm that replicates the learning issues and complexities associated with limited resources and complicated implementation that affect most multigrade systems across Central Philippines. As a small-scale, locale-based learning community mandated by the Department of Education, the choice of a specific research site is seen as offering a high-density setting for an insightful view of local pedagogical operations. However, the spatial and social context of the present investigation is a limitation. The sample size for the research, which consists of a limited small sample size of local public-school (N=32 teachers) within a particular division, may not be generalizing in large public-schools located in big-city campuses or highly populated divisions, or within diverse regional context of the Philippines, the chosen site has strictly been governed by the constraints and guidelines set by the Division for a reliable empirical-metric of base-line.

Respondents of the Study

The study respondents were the thirty-two (32) public elementary school classroom teachers managing multi-grade level classrooms in the first congressional districts of a large division in the Negros Island Region during the academic year 2025-2026. The researcher used a nonprobability sampling method, specifically purposive sampling, to accommodate the study's tight constraints. According to Ames, Glenton, & Lewin (2019), the purposive sampling method is used when researchers exercise their discretion to select a sample of individuals or data sources considered particularly "information-rich". It ensured the selection of participants according to the researchers' intentionally chosen criterion: they should be current, regular, and/or permanent teachers of multi-age, multi-grade classrooms. They should presently be directly implementing the learning experience for students. These parameters were included in the design to ensure they have real-time technical skills and experience in localized instructional, management, and evaluation practices in multi-grade teaching. The researcher conducted an exact enumeration; there were no sample fractions or statistical computations to determine the sample size, as all thirty-two (32) respondents represent the existing universe of all multi-grade practitioners in the said first congressional districts of the division, making it N = 32.

Data Gathering Instrument

The study used a two-part researcher-designed survey questionnaire to measure the structural facets of multigrade teaching practices as the primary variables. The first part comprises the teachers' personal profiles, which map critical demographic



characteristics including age, educational attainment, length of service, and the number of training sessions attended. The second part of the questionnaire operationalizes and evaluates the extent of multigrade teaching practices, which are structured into three distinct behavioral dimensions: instructional strategies, classroom management, and assessment. This core section consists of 10 items per area, for a total of 30. To ensure objective behavioral mapping, respondents were asked to rate each item on a five-point Likert scale, with the following scores: 5 (Always), 4 (Often), 3 (Sometimes), 2 (Rarely), and 1 (Almost Never).

Instrument Validity and Reliability

To ensure the psychometric soundness of the researcher-made instrument, content validity was established through a formal review by three education experts, including two master teachers and a school principal, all of whom hold advanced degrees in educational management and administration. Evaluated using the criteria set forth by Carter V. Good and Douglas E. Scates, the instrument achieved a validation index of 4.83, indicating “excellent” validity and confirming that it accurately measures the intended multigrade variables.

Following validation, the questionnaire’s internal consistency was verified through a pilot study involving 30 non-participating multigrade teachers from an adjacent congressional district. Analyzing the pilot data via Cronbach’s Alpha yielded a highly acceptable reliability coefficient of 0.932. This “excellent” rating guarantees that the instrument yields consistent, reproducible results with minimal measurement error before full deployment.

Data Gathering Procedure

To ensure the orderly execution of the study, the researcher commenced data collection by obtaining written permission from the Schools Division Superintendent, who was approved by the district supervisors and the concerned school heads. After obtaining permission from the relevant authorities, the researcher explained the purpose of her study to her participants, distributed the questionnaire and informed consent form, and obtained their consent. To avoid any interruption to the ongoing instructional process, instruments were carefully arranged and fully retrieved. The instruments were administered with a 4-week lead time, with the researcher’s contact number available for technical concerns. Finally, the researcher personally retrieved them after the time had elapsed. The data were accordingly entered, tabulated, and analyzed using Statistical Package for the Social Sciences (SPSS) for descriptive, comparative, and correlational research, respectively, to support an evidence-based conclusion and sustainable recommendations.

Research Ethics Protocol

This research paper ensured it posed no threat to its targeted respondents by keeping responses confidential and anonymous throughout the study. At the beginning of the study, the undersigned obtained their prior free and informed consent, with the option to withdraw from the research if they felt it necessary. No personal information that could endanger their identity was collected, in accordance with RA 10173, or the Data Privacy Act of 2012, regarding researchers’ and analysts’ access to the data. They were assured that any data that could reveal participants’ identities would not be released or published without their prior consent, as applicable. Moreover, all collected materials were disposed of by machine shredding and dilution in water after the submission of the research. On the other hand, soft copy data were deleted and cannot be retrieved by any means.

RESULTS AND DISCUSSION

Overall Level of Multigrade Teaching Practices

The overall level of multigrade teaching practices across the three primary dimensions was exceptional, with all areas achieving a ‘Very High Level’ rating: Classroom Management ($M = 4.79$), Assessment ($M = 4.65$), and Instructional Strategies ($M = 4.62$). Tables 1 through 3 detail the specific itemized indicator evaluations.

Table 1

Level of Multigrade Teaching Practices according to Instructional Strategies

Instructional Strategies Indicators (As a Multigrade teacher, I...)	Mean	Interpretation
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1. incorporate diverse teaching materials to help multigrade learners meet outcomes.	4.63	Very High Level
2. integrate technology into teaching to actively engage multigrade learners.	4.69	Very High Level
3. apply interactive instruction to address needs for active learning and interaction.	4.78	Very High Level
4. modify instructional strategies based on multigrade learners' needs and abilities.	4.56	Very High Level
5. conduct experiential instruction directly involving learners (experiments, role play).	4.59	Very High Level
6. employ indirect instruction to develop critical thinking (case studies, inquiry).	4.53	Very High Level
7. use various presentation formats to appeal to different learning styles.	4.56	Very High Level
8. use games as a teaching-learning strategy for multigrade learners.	4.50	Very High Level
9. adjust teaching pace or reteach if needed to ensure full understanding.	4.66	Very High Level
10. use online resources and multimedia to deliver instruction.	4.66	Very High Level
OVERALL MEAN	4.62	Very High Level

As shown in Table 1, the overall mean for instructional strategies was 4.62 (very high level). The highest-rated practice was interactive instruction ($M = 4.78$), indicating that multigrade teachers prioritize collaborative peer engagement. Conversely, using games as a teaching strategy received the lowest rating ($M = 4.50$). While still classified as a very high level, game-based learning requires extensive preparation time and physical resources, which are severely constrained in multigrade schools (Naparan & Castañeda, 2021).

Table 2

Level of Multigrade Teaching Practices according to Classroom Management

Classroom Management Indicators (As a Multigrade teacher, I...)	Mean	Interpretation
1. Maintain a classroom environment of courtesy and respect across grade levels	4.84	Very High Level
2. Provide gender-fair opportunities for learning	4.88	Very High Level
3. Make the classroom environment safe and conducive to learning	4.97	Very High Level
4. Maintain a clean and orderly classroom physical arrangement	4.91	Very High Level
5. Practice consistent and preventive discipline	4.69	Very High Level
6. Enforce school policies and procedures for appropriate learner behavior	4.72	Very High Level
7. Take measures to minimize anxiety and fear of the teacher and subject	4.59	Very High Level
8. Encourage free expression of ideas by multi-grade-level learners	4.81	Very High Level



9. Allocate equal time and unbiased learning opportunities to every grade level	4.75	Very High Level
10. Provide leadership and responsibility roles among multigrade learners	4.72	Very High Level
OVERALL MEAN	4.79	Very High Level

Table 2 outlines classroom management execution, posting the highest overall mean of 4.79 (very high level). Establishing a safe and conducive learning environment achieved the highest individual mean ($M = 4.97$). Minimizing student anxiety towards the teacher or subject registered the lowest mean ($M = 4.59$). Heavy multigrade workloads force educators to focus on task completion and physical order, leaving less time to address individual students' anxiety (Abbasian, 2024).

Table 3

Level of Multigrade Teaching Practices according to Assessment

Assessment Indicators (As a Multigrade teacher, I...)	Mean	Interpretation
1. Introduce the bases of the grading system and guide students to determine achievement	4.59	Very High Level
2. Prepare formative and summative tests in line with grade levels	4.81	Very High Level
3. Regularly monitor and provide feedback on performance (strengths/weaknesses)	4.66	Very High Level
4. Conduct assessments and activities through group/team performance tasks	4.53	Very High Level
5. Encourage self-assessment, evaluation, and reflection among learners	4.44	High Level
6. Implement fair and unbiased grading practices	4.69	Very High Level
7. Communicate promptly with parents and superiors regarding progress	4.66	Very High Level
8. Interpret assessment results to improve the teaching-learning process	4.72	Very High Level
9. Keep accurate records of learners' grades and performances	4.81	Very High Level
10. Employ non-traditional assessment techniques (portfolios, journals)	4.63	Very High Level
OVERALL MEAN	4.65	Very High Level

Table 3 presents assessment practices, yielding an overall mean of 4.65 (very high level). Preparing grade-aligned tests and maintaining accurate grade records achieved the highest mean ($M = 4.81$). Remarkably, encouraging student self-assessment and reflection posted the single lowest score across the entire study ($M = 4.44$, high level). Primary multigrade pupils often lack the metacognitive maturity to conduct accurate self-evaluations without intensive teacher guidance (Recta & Potane, 2023).

Inferential Analysis Across Profile Variables

To test the null hypothesis, Mann-Whitney U tests were executed across all profile variables (age, educational attainment, length of service, and number of trainings attended). Table 4 synthesizes the inferential results.



Table 4

Summary of Mann-Whitney U Test Results Across Demographic Profile Variables

Variable	Dimension	Mann-Whitney U	p-value	Sig.	Interpretation
Age (Younger vs Older)	Instructional Strategies	98.00	0.480	0.05	Not Significant
	Classroom Management	95.50	0.381	0.05	Not Significant
	Assessment	96.00	0.422	0.05	Not Significant
Educational Attainment (Lower vs Higher)	Instructional Strategies	98.50	0.493	0.05	Not Significant
	Classroom Management	104.00	0.614	0.05	Not Significant
	Assessment	109.50	0.805	0.05	Not Significant
Length of Service (Shorter vs Longer)	Instructional Strategies	95.00	0.717	0.05	Not Significant
	Classroom Management	102.00	0.945	0.05	Not Significant
	Assessment	93.50	0.663	0.05	Not Significant
Trainings Attended	Instructional Strategies	61.50	0.011	0.05	SIGNIFICANT
(Few vs Many)	Classroom Management	111.00	0.491	0.05	Not Significant
	Assessment	75.00	0.040	0.05	SIGNIFICANT

As detailed in Table 4, the null hypothesis is accepted for age, educational attainment, and length of service across all dimensions ($p > 0.05$). Age, tenure, and formal academic degrees do not create statistically significant differences in multigrade execution, demonstrating a universal operational baseline among teachers in the division (Broce, 2020).

Conversely, the null hypothesis is REJECTED for the number of trainings attended regarding instructional strategies ($U = 61.50$, $p = 0.011$) and Assessment ($U = 75.00$, $p = 0.040$). Interestingly, teachers who attended fewer training sessions posted higher execution means ($M = 4.76$ and 4.81) than those who attended many training sessions ($M = 4.45$ and 4.48). Further analysis reveals that teachers with fewer formal training sessions relied heavily on advanced graduate studies and personal adaptability, whereas existing DepEd multigrade training workshops often lacked specialized, practical relevance to rural multigrade contexts (Evangilio & Escote, 2024; Fon & Tumarong, 2025).

PROPOSED SUSTAINABILITY PLAN FOR SY 2026–2027

To address the specific operational deficiencies identified in game-based instruction, anxiety reduction, and student self-assessment, a structured Sustainability Plan was developed for implementation during School Year 2026–2027.

Table 5

Proposed Sustainability Plan Matrix for SY 2026–2027

Area of Concern	Objective	Key Activities	Timeframe	Persons Involved	Expected Output
Instructional Strategies:	Strengthen teacher competence in	“The Game I Used to Be!”: - Hands-on training on	Quarterly	MG Teachers, School	Contextualized game-based material packages per grade level



Game-Based Learning	game-based teaching approaches	game-based pedagogy - Development of contextualized learning games	Heads, PSDS, CID		
Classroom Management: Discipline & Environment	Enhance classroom management and minimize student anxiety	“The Classroom Manager”: - District seminar on multigrade discipline - Re-orientation on Child Protection & Inclusive Education	Quarterly Teachers, School Heads, PSDS, Resource Persons	Reskilled teachers in positive discipline & orderly management	
Assessment: Self-Evaluation Tools	Deepen knowledge in developing student self-assessment tools	“The Fun of Assessment”: - Workshop on simplified self-reflection rubrics and visual self-grading tools	Quarterly Teachers, Learners, CID Personnel	Standardized, child-friendly self-assessment toolkits	

CONCLUSION

This study systematically evaluated multigrade teaching practices across public elementary schools, revealing that teachers possess an overall very high level of competence in instructional strategies, classroom management, and assessment, despite lower relative execution in play-based techniques and student self- or peer-evaluations. Demographic factors such as age, educational attainment, and tenure showed no statistically significant relationship with teaching competencies, whereas attending three or more specialized training sessions was the sole decisive factor driving significantly higher proficiency. These empirical findings support David Johnson’s Cooperative Learning Theory by emphasizing student autonomy through peer scaffolding, while advancing Sustainable Development Goal 4 and DepEd Republic Act 9155 through targeted professional development in Geographically Isolated and Disadvantaged Areas (GIDAs). However, the study’s generalizability and depth are limited by its small, localized sample size ($N = 32$), reliance on self-reported survey data susceptible to social desirability bias, and lack of qualitative classroom observations. Consequently, sustainable multigrade education requires structural investments in continuous specialized teacher training, alongside future research incorporating observational and qualitative methods to broaden instructional insights. way.

RECOMMENDATIONS

To address the identified execution gaps and maximize instructional quality in multigrade classrooms, stakeholders must collaborate across all administrative and pedagogical levels through evidence-based practices. Department of Education (DepEd) division officials and school administrators should institutionalize mandatory specialized in-service training, requiring at least three workshops annually, alongside monthly Learning Action Cell (LAC) sessions, dedicated funding for GIDA schools, and peer mentorship programs to bridge the training-performance gap. Concurrently, multigrade teachers and curriculum developers must actively integrate play-based learning models and MATATAG-aligned formative tools, such as self-check cards, peer-rating scales, and gamified activity sheets, to foster student autonomy and active participation. These initiatives are operationally structured into the Proposed Sustainability Plan for SY 2026–2027 across targeted modules, including “The Game I Used to Be!” (Q1), “The Classroom Manager” (Q2), and “The Fun of Assessment” (Q3), which deliver contextualized kits, behavioral manuals, and self-check rubrics. Finally, future researchers should expand the scope of the study through mixed-methods designs across broader regional samples and conduct longitudinal evaluations to measure the impact of this sustainability plan on students’ academic achievement over time.

Conflict of Interest

The authors declare no personal, financial, or institutional conflicts of interest regarding the conduct or publication of this research. The study was conducted independently for academic and professional enhancement.



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