Assessing Teacher Proficiency in Differentiated Instruction: Development and Validation of a Performance Appraisal Tool for Philippine Multigrade Classrooms

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Abstract: This study explores the implementation of Differentiated Instruction (DI) in Philippine multigrade classrooms and develops a tool to assess teacher proficiency in DI. Employing an exploratory sequential mixed-method design, the qualitative phase included focus group discussions with eight multigrade teachers, capturing their experiences and challenges in DI. These insights informed the creation of the Multigrade Differentiated Instruction Performance Appraisal Tool, which assesses DI proficiency across instructional planning, delivery, and classroom management. The tool underwent expert validation and reliability testing, with Cronbach's Alpha of 0.91, indicating high internal consistency. The quantitative phase surveyed 163 multigrade teachers, revealing that DI implementation was generally effective, particularly in aligning lessons with curriculum standards (M = 4.09, SD = 0.73) and fostering a supportive learning environment. However, teachers faced challenges in utilizing technology, contextualized materials, and diverse assessment methods. Findings support the DI Assessment Checklist as a valuable tool for teachers and administrators to enhance instructional practices through reflective teaching. Recommendations include expanding training programs, improving access to instructional resources, and integrating DI-focused technology training. Further research should explore regional variations in DI implementation to inform more localized educational policies. This study provides practical insights to support teachers in effectively managing the complexities of multigrade education, ensuring equitable and inclusive learning experiences for diverse learners.

Keywords: *Differentiated instruction, performance appraisal tool, teacher proficiency.*

Introduction

The Philippine public elementary school system consists of two types of schools: monograde and multigrade. In monograde schools, classes are composed of students from a single grade level, whereas in multigrade schools, students from different grade levels are grouped under one teacher (Berry, 2001). Multigrade education is widely implemented in rural areas where student populations are lower, requiring educators to adopt innovative teaching strategies to accommodate diverse learners (Mengistie, 2020).

In 2013, the Department of Education (DepEd) mandated that all public school teachers in the Philippines undergo national training as part of the implementation of the K to 12 Basic Education Program under Republic Act 10533, also known as the "Enhanced Basic Education Act of 2013" (Republic Act, 2013). This policy emphasized Differentiated Instruction (DI) as a pedagogical approach to address diverse learner needs, recognizing that students have varied learning preferences, abilities, and backgrounds (Pozas et al., 2020; Whitley et al., 2019).

DI is particularly crucial in multigrade classrooms, where learners vary significantly in cognitive and socio-emotional development. Studies indicate that DI improves academic performance, motivation, and engagement by customizing content, processes, and assessments to match learners' needs (Goyibova et al., 2025; Kalinowski et al., 2024). Research also highlights the importance of equity pedagogy, which ensures that all students, regardless of their backgrounds, receive high-quality education and opportunities for success (Magableh & Abdullah, 2022; Tomlinson, 2014).

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Implementing DI effectively requires pedagogical tools that support teachers in planning, instruction, and classroom management. Studies emphasize the role of structured assessment tools in helping teachers evaluate their DI implementation and improve their reflective teaching practices (Nguyen & Habók, 2023; Uerz et al., 2017). Without appropriate evaluation measures, addressing the complexities of a multigrade classroom becomes challenging (Shareefa, 2022). If well-defined assessment frameworks guide teachers, they can foster responsive learning environments that enhance student outcomes (Singh et al., 2024). Teachers' self-efficacy, enthusiasm, and professional training significantly impact their ability to implement DI strategies effectively (Kalinowski et al., 2024). Delos Reyes and Batoon's (2023) study on teacher emotional geographies underscores the importance of emotional awareness and positive relationships in promoting DI practices in multigrade classrooms.

While existing studies on DI have extensively examined its theoretical foundations, implementation strategies, and impact on student learning outcomes, there remains a notable gap in empirical research focusing on teacher proficiency in DI within Philippine multigrade classrooms. Previous research primarily emphasizes curriculum differentiation models (Tomlinson, 2014; Valiandes, 2015), teacher perceptions of DI (Whitley et al., 2019), and challenges in its implementation (Mengistie, 2020). However, a systematic tool for assessing teacher effectiveness in DI—particularly in multigrade settings—has not been adequately developed and validated.

To bridge this gap, this study aims to investigate the extent to which DI is implemented in Philippine multigrade classrooms, particularly in instructional planning, delivery, and management. Additionally, it seeks to develop a Multigrade Differentiated Instruction Performance Appraisal Tool. This structured assessment framework evaluates teacher proficiency across instructional planning, instructional delivery, and classroom management in a multigrade DI context. It allows teachers to evaluate their DI practices, identify areas for improvement, and enhance reflective teaching strategies.

Unlike previous studies, which often focus on general DI implementation (Magableh & Abdullah, 2022; Pozas et al., 2020), this research uniquely integrates qualitative insights from multigrade teachers with a theoretically grounded, empirically validated assessment instrument. By employing an exploratory sequential mixed-method design, this study ensures that the appraisal tool is academically rigorous but also practically relevant to teachers and administrators working in Philippine multigrade classrooms.

The objectives of the study are to:

1. Develop a Multigrade Differentiated Instruction Performance Appraisal Tool focusing on instructional planning, instructional delivery, and classroom management.

2. Determine the extent of implementation of Differentiated Instruction in multigrade classrooms in terms of instructional planning, instructional delivery, and classroom management using the developed Multigrade Differentiated Instruction Performance Appraisal Tool.

3. Determine the degree of teacher-pupil relationship in a multigrade differentiated learning environment.

4. Test the significant relationship between the extent of implementation of Differentiated Instruction and the degree of teacher-pupil relationship.

5. Provide recommendations to strengthen the implementation of Differentiated Instruction on aspects needing improvement concerning instructional planning, delivery of teaching, and classroom management in multigrade schools.

Methodology

Research Design

This study employed an exploratory sequential mixed-method research design, which involves a two-phase approach where qualitative data collection (exploratory) and analysis precede and inform the subsequent quantitative phase (developmental). By incorporating qualitative insights into a structured quantitative framework, this design facilitated a comprehensive understanding of DI practices and their effectiveness in multigrade settings. The exploratory sequential design was chosen to explore and document the qualitative experiences and best practices of teachers in multigrade settings before developing a structured, quantitative evaluation tool. This approach ensured that the instructional evaluation tool was deeply rooted in the practices and challenges experienced by multigrade teachers, making it both practical and relevant to their unique context.

In the initial qualitative phase, the study explored the multigrade DI practices and teachers' experiences in implementing DI through focus group discussions with multigrade practitioners. The interviews were conducted to gather detailed insights into how teachers adapt DI strategies in instructional planning, instructional delivery, and classroom management. Practitioners shared their real-world experiences, challenges, and successful strategies for differentiating instruction in multigrade settings. The data collected from these discussions were analyzed thematically, focusing on common challenges, effective DI practices, and the specific needs of multigrade classrooms. This qualitative phase also integrated theoretical models of DI derived from the literature, including frameworks by Tomlinson (2014) and

Vygotsky's Zone of Proximal Development (1978), to ensure that the practical experiences gathered from teachers aligned with established DI concepts.

Subsequently, the findings from this phase guided the development of the Differentiated Instruction Performance Appraisal Tool designed to assess teacher proficiency in DI across three key areas: (1) Instructional Planning, (2) Instructional Delivery, and (3) Classroom Management, which was then tested and validated using quantitative methods. The quantitative phase involved surveying a larger sample of multigrade teachers to assess the extent of DI implementation and validate the newly developed appraisal tool.

The instructional evaluation tool was grounded in both the theoretical models studied in the literature and the practical experiences documented by the multigrade practitioners. This tool included measurable indicators of DI proficiency, such as creating differentiated lesson plans, adapting instructional strategies for diverse learners, and managing multigrade classrooms effectively. The tool was piloted and refined based on feedback from expert practitioners to ensure its validity and applicability in real classroom settings.

By integrating qualitative and quantitative methods, this design ensured that the resulting performance appraisal tool was evidence-based and theoretically sound. Additionally, it was tailored to the needs of Philippine multigrade classrooms, making it a practical and relevant assessment framework.

Sample and Data Collection

In collecting qualitative data, eight teachers from eight selected multigrade schools in Regions III, IV-CALABARZON, and IV-MIMAROPA were involved in the focus groups. The participants were trained on DI through the DepEd National Training Program.

Respondents were selected through purposive sampling and identified by district supervisors based on the multigrade class composition (two-grade or three-grade combinations) they handled and their participation in DI-related training. The researcher coordinated with the District Offices to ensure all participating schools were informed about the research.

In collecting quantitative data, the study's respondents consisted of 163 multigrade teachers from 121 multigrade schools across the Philippines. The schools were geographically distributed as follows: Luzon (75 teachers), Visayas (34 teachers), and Mindanao (54 teachers). Within Luzon, the regions represented were Ilocos (6), Cordillera Administrative Region (5), Cagayan Valley (9), Central Luzon (11), Southern Tagalog IV-A (20), Southern Tagalog IV-B (14), and Bicol (10). In the Visayas, the regions included Western Visayas (13), Central Visayas (8), and Eastern Visayas (13). In Mindanao, the regions were Zamboanga Peninsula (8), Northern Mindanao (9), Davao Region (7), SOCCSKSARGEN (8), CARAGA (18), and the Autonomous Region in Muslim Mindanao (2). Data collection was done using survey questionnaires administered to the respondents during their free time to minimize classroom disruption.

Analyzing of Data

To ensure the validity and reliability of the Multigrade Differentiated Instruction Performance Appraisal Tool, a multi-stage validation process was conducted, including expert review, pilot testing, and statistical validation. The tool was initially developed based on insights from focus group discussions with multigrade teachers and a review of established DI models (Tomlinson, 2014; Valiande & Koutselini, 2009). To assess validity of content, a panel of seven (7) education experts evaluated the tool for clarity, relevance, and completeness. This panel comprised two (2) multigrade program coordinators, two (2) education program supervisors specializing in teacher training and assessment, and three (3) multigrade school principals responsible for DI implementation. Their feedback led to refinements in indicator wording, scoring rubrics, and overall framework. Following expert validation, the tool underwent pilot testing with 20 multigrade teachers who used it for self-assessment, while observer ratings were collected for comparison. Feedback from teachers ensured that the tool was practical, easy to use, and aligned with classroom realities.

Reliability testing was conducted through Cronbach's Alpha to measure internal consistency, ensuring that the items within each dimension of the Multigrade Differentiated Instruction Performance Appraisal Tool were consistently assessing the intended constructs. The results indicated that the overall Cronbach's Alpha coefficient for the instrument was 0.91, which exceeds the acceptable threshold of 0.70 (Nunnally & Bernstein, 1994), indicating high internal consistency and reliability.

A systematic intercoder agreement process was followed to ensure inter-rater reliability in the qualitative analysis. A preliminary codebook was developed, incorporating definitions, examples, and coding rules for theme identification. Three independent qualitative researchers coded 20% of the transcripts separately, and discrepancies in coding were resolved through discussions to refine definitions and thematic alignment. Cohen's Kappa coefficient was computed to measure inter-rater agreement beyond chance, with a Kappa score of 0.82, which is indicative of strong reliability (Landis & Koch, 1977).

These reliability measures confirm that the appraisal tool is both consistent and reliable in assessing teacher proficiency in differentiated instruction within multigrade classrooms. These processes ensured that the final validated tool was standardized, objective, and effective in evaluating teacher proficiency in DI within multigrade classrooms.

A thematic analysis was employed for the focus group discussions. The transcripts from the discussions were coded to identify recurring themes, patterns, and insights related to DI implementation. Themes were categorized into three primary areas: (1) instructional planning, (2) instructional delivery, and (3) classroom management. The qualitative data were used to complement the quantitative findings, providing context and a deeper understanding of the challenges and successes teachers face in using DI in multigrade classroom environments. The outcomes of these analyses aimed to provide insights into the effectiveness of DI in multigrade classrooms and guide the development of tools and strategies to enhance educational practices in these unique learning.

For the quantitative phase, two main instruments were used for data collection:

1. DI Performance Checklist: A checklist of DI performance measures and indicators was used to assess instructional planning, instructional delivery, and classroom management. The checklist was based on the results of qualitative data, learning models, and theories of differentiated instruction by Valiande and Koutselini (2009) and Tomlinson (2014). The responses were measured through a scale with a point system and interpretation presented as Very Great Extent (4.21–5.00), Great Extent (3.41–4.20), Moderate Extent (2.61–3.40), Light Extent (1.81–2.60), and No Extent (1.00–1.80).

2. Teacher-Pupil Relationship Survey: This survey assessed the degree of teacher-pupil relationships within a multigrade differentiated learning environment. The survey consists of seven items categorized under key dimensions that assess trust, inclusivity, collaboration, and instructional engagement within the classroom setting. Each item is rated using a Likert scale with five levels of interpretation: Very Great Extent (4.21–5.00), Great Extent (3.41–4.20), Moderate Extent (2.61–3.40), Light Extent (1.81–2.60), and No Extent (1.00–1.80).

For data analysis, descriptive statistics such as frequency count, percentage, weighted mean, and standard deviation were used to summarize responses. Additionally, inferential statistics were applied, particularly Pearson's correlation coefficient (r), to examine whether a statistically significant relationship existed between the extent of DI implementation and the degree of teacher-pupil relationships. All statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS) to ensure accuracy and reliability.

Findings/Results

Multigrade Differentiated Instruction Performance Appraisal Tool

The creation of the multigrade DI performance appraisal tool was based on the results of the Focus Group Interview (FGI) conducted with multigrade teachers and DI concepts along with theoretical models studied about the creation of Tomlinson and Imbeau's (2023) Differentiated Instructional Model, Tomlinson's (2014) Model of Differentiated Instruction, Valiande and Koutselini's (2009) Planning and Application of Effective Differentiated Instruction in Mixed-Ability Classrooms, Richards and Farrell's (2011) Classroom Observation Checklists and Principles of Differentiated Instruction, and Booth and Ainscow's (2016) Index for Inclusion: A Guide to School Development Led by Inclusive Values (4th Ed.).

The analysis of the integration of DI learning theories and the insights generated from the FGI identified three (3) key teaching components for differentiating multigrade instruction. These components can be applied and assessed within the field of instructional planning, instructional delivery, and classroom management, as illustrated in Figure 1.
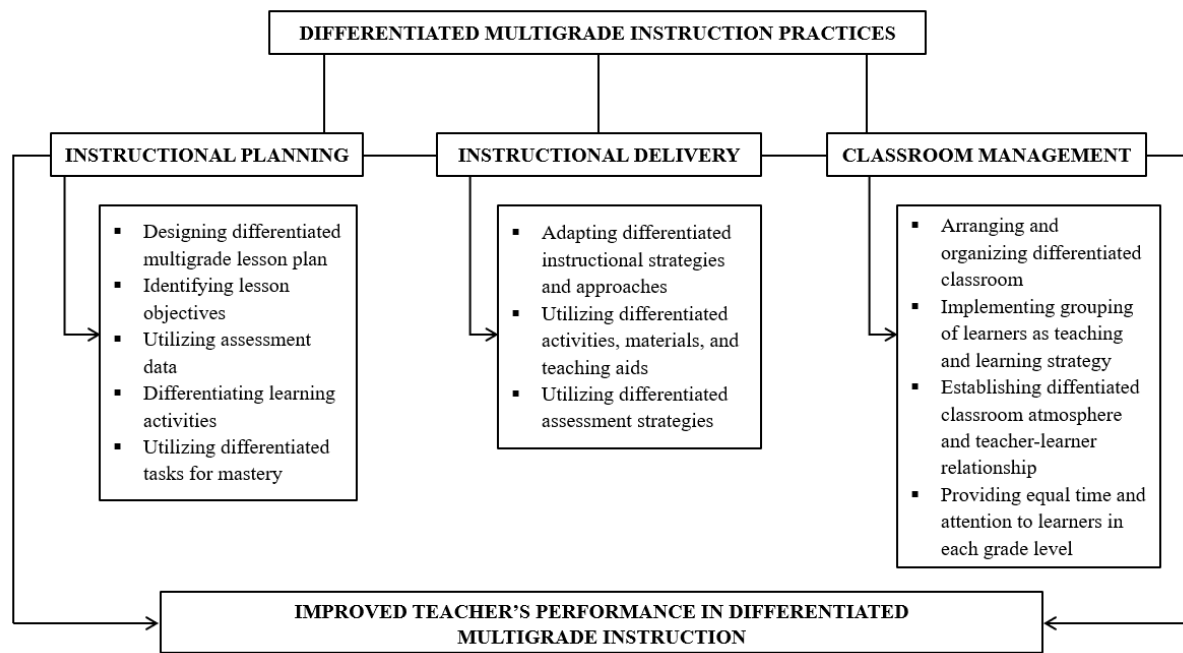
Figure 1. Differentiated Multigrade Instruction Practices Model

Subsequently, this information was utilized to craft the multigrade DI performance checklist. Tables 1-3 outline the indicators that delineate teachers' competencies within each teaching component. To ensure the tool's appropriateness and effectiveness in assessing DI performance, it underwent validation through experts' evaluation and critique. The experts involved in this validation process included multigrade program coordinators, education program supervisors, and multigrade school principals from different regions across the country.

Table 1. Assessment Dimension: Instructional Planning

This component assesses teachers' knowledge and skills in planning and designing differentiated multigrade instructional plans using the national curriculum.
Competency
The teacher . . .
▪ prepares multigrade differentiated daily lesson plans.
▪ sets lesson objectives aligned with the K to 12 Curriculum, pupils' context, and learning needs.
▪ uses individual pupils' formative assessment data consistently to plan differentiated instruction for content mastery, pacing, and transitions.
▪ differentiates learning plans considering the content, process, and product.
▪ develops differentiated learning plans for each grade to accommodate pupils' learning needs and capabilities, reflecting both individual and group interests, ability levels, and learning styles.
▪ includes various performance tasks or activities to assess students' mastery of lesson content.
▪ includes various performance indicators for pupils to demonstrate evidence of learning (e.g., tiered assessment at the formative stage of assessment, choice of culminating products).

Table 2.A. Assessment Dimension: Instructional Delivery (Use of Teaching Strategies and Approaches)

This component assesses the teacher's knowledge and skills in differentiating instruction through the use of a wide variety of instructional strategies and approaches that are responsive to students' learning differences and preferences.
Competency
The teacher . . .
▪ prioritizes what content pupils are expected to learn.
▪ uses differentiated instructional strategies by which pupils gain easy access to the content (e.g., audio, video, visuals, guide notes, technological assistance).
▪ engages and maintains pupils in active learning.
▪ provides collaborative and learner-centered learning opportunities for pupils to work individually, in pairs, in small groups, and in whole class.
▪ reinforces learning goals consistently throughout the lessons.

Table 2.B. Assessment Dimension: Instructional Delivery (Use of Learning Activities and Materials)

This component assesses the teacher's knowledge and skills in differentiating instruction through the use of a wide variety of learning activities and instructional resources that are responsive to learner's needs, interests, and learning styles.
Competency
The teacher . . . ▪ provides learning activities and materials that are appropriate to the learner's age/grade, ability levels, interests, and learning styles. ▪ provides learning activities by which learners can engage in or make sense of the content based on their interests or needs, learning styles, etc. ▪ provides learners with appropriately challenging learning tasks (e.g., questioning, student work). ▪ uses technology (such as iPads, laptops, smartphones, smart TVs, computers, OHP, LCD, and the internet) to teach the lesson to enhance learning. ▪ uses contextualized materials to reinforce learning.

Table 2.C. Assessment Dimension: Instructional Delivery (Use of Assessment Strategies and Techniques)

This component assesses teachers' knowledge and skills in differentiating instruction through the use of effective assessment strategies and tools to diagnose and evaluate learners' learning in a way that is consistent with the curriculum requirements.
Competency
The teacher . . . ▪ aligns student assessment with the K to 12 curriculum standards and competencies prescribed for each grade. ▪ uses a variety of assessment strategies throughout the lesson (e.g., informal checks, questions, observation, assignments). ▪ provides differentiated assessment tasks to pupils to check for understanding of the lesson. ▪ provides assessment tasks that are sensitive to pupil diversity (interest, ability, learning styles, culture). ▪ allows pupils to demonstrate understanding of the lesson using different mediums (for example, presenting information through a video clip as opposed to a written piece, role-play, dance, and other performance tasks). ▪ uses assessment tools for both formative and summative purposes to inform, guide, and adjust pupils' learning. ▪ modifies assessment tasks to accommodate pupils' learning needs. ▪ involves pupils in monitoring their own progress. ▪ gives constructive and frequent feedback to pupils about their learning.

Table 3. Assessment Dimension: Classroom Management

This component assesses the teacher's knowledge and skills in establishing, communicating, and maintaining clear expectations for student behavior through the use of effective routines, procedures, and techniques that consistently encourage students to engage and sustain their interest in performing learning activities in the classroom.
Competency
The teacher . . . ▪ arranges tables and seats to accommodate pupils' work and learning needs. ▪ establishes classroom rules and procedures, expectations, and routines that are enforced consistently and fairly. ▪ establishes teacher's schedules that indicate a systematic plan for the lesson activities. ▪ practices the teacher's role as a facilitator and participant in the teaching and learning process. ▪ uses grouping strategies in a variety of ways (e.g., whole group, small groups, partners, heterogeneous and homogeneous groups) with tasks designed to learn the necessary skills expected from the group activity. ▪ interacts with all of the different groups during the course of the lesson. ▪ monitors group participation and involvement to ensure learners' learning progress and provides feedback. ▪ uses learning centers as learners' working stations based on interests, needs, or choices. ▪ maximizes instructional learning time by giving equal time to work with learners individually as well as in small groups. ▪ promotes a child-friendly learning environment where everyone feels valued and recognized by respecting each other's diversity.

Instructional Planning

The study assessed teachers' self-reported practices regarding the extent of differentiated instructional planning in multigrade schools. Table 4 presents the average ratings provided by teachers across several indicators, measuring how effectively DI principles are integrated into instructional planning.

Table 4. Extent of Planning Multigrade Differentiated Instruction as Rated by Teachers

Indicators	M	SD	I
1. Prepare multigrade daily lesson plans.	4.04	.83407	GE
2. Align lesson objectives with the K to 12 curriculum and pupils' context and learning needs.	4.31	.78191	VGE
3. Use individual pupil's formative assessment data consistently to plan differentiated instruction for content mastery, pacing, and transitions.	3.94	.72224	GE
4. Differentiate learning plans considering the content, process, and product.	3.90	.82112	GE
5. Develop differentiated learning plans for each grade level to accommodate pupils' learning needs and capabilities, reflecting both individual and group interests, ability levels, and learning styles.	3.88	.72668	GE
6. Include various performance tasks or activities to assess students' mastery of lesson content.	3.93	.74997	GE
7. Include various performance indicators for pupils to demonstrate evidence of learning (e.g., tiered assessment at the formative stage of assessment, choice of culminating products).	3.80	.77108	GE
Average	**3.97**	**0.77243**	**GE**

Overall, teachers rated their instructional planning practices as "Generally Effective" (GE), with an average score of 3.97 (SD = 0.77243). The highest-rated indicator was "Align lesson objectives with the K to 12 curriculum and pupils' context and learning needs," with a mean of 4.31 (SD = 0.78191), indicating that teachers are very effective in ensuring that their lesson objectives are aligned with curricular standards and adapted to student's specific needs and backgrounds.

Other indicators, such as "Prepare multigrade daily lesson plans" (M = 4.04, SD = 0.83407) and "Use individual pupil's formative assessment data to plan differentiated instruction" (M = 3.94, SD = 0.72224), suggest that teachers consistently use DI strategies for daily planning and consider formative assessment data to enhance instructional pacing and transitions. However, some indicators received slightly lower ratings. For example, "Develop differentiated learning plans for each grade level" (M = 3.88, SD = 0.72668) indicates a moderate challenge in creating tailored plans that address individual and group needs across multiple grade levels. Similarly, "Include various performance indicators for pupils to demonstrate evidence of learning" (M = 3.80, SD = 0.77108) suggests there is room for improvement in providing diverse assessment options. These results reflect teachers' general effectiveness in incorporating DI into instructional planning but highlight areas where additional support or resources may be beneficial for further refinement and consistency in differentiated planning.

Instructional Delivery

The study evaluated teachers' self-reported practices on the use of differentiated instructional strategies and approaches in multigrade classrooms. Table 5.1 presents the average ratings provided by teachers on various indicators of instructional delivery, capturing how effectively they apply differentiated strategies to enhance learning for diverse students in multigrade settings.

Table 5.1. Extent of Utilization of Differentiated Instructional Strategies and Approaches as Rated by Teachers

Indicators	M	SD	I
1. Prioritize what content pupils are expected to learn (e.g., essential materials vs. Incidental facts/enrichment).	3.93	.76625	GE
2. Use differentiated instructional strategies by which pupils gain easy access to the content (e.g., audio, video, visuals, guide notes, technological assistance).	3.97	.78899	GE
3. Engage and maintain pupils in active learning.	4.21	.67351	VGE
4. Provide collaborative and learner-centered learning opportunities for pupils to work individually, in pairs, in small groups, and in whole class.	4.24	.69241	VGE
5. Reinforce learning goals consistently throughout the lessons.	3.94	.66382	GE
Average	**4.06**	**.71699**	**GE**

The average rating for instructional delivery practices was 4.06 (SD = 0.71699), with teachers demonstrating generally effective use of differentiated instructional strategies. The highest-rated indicators were "Provide collaborative and

learner-centered learning opportunities" (M = 4.24, SD = 0.69241) and "Engage and maintain pupils in active learning" (M = 4.21, SD = 0.67351), indicating that teachers are very effective in creating an interactive and inclusive learning environment. These practices suggest that teachers prioritize active learning and collaboration, which are key elements of DI.

Other indicators, such as "Use differentiated instructional strategies by which pupils gain easy access to content" (M = 3.97, SD = 0.78899) and "Reinforce learning goals consistently throughout the lessons" (M = 3.94, SD = 0.66382), also reflect effective practices. However, the indicator, "Prioritize what content pupils are expected to learn (M = 3.93, SD = 0.76625), reflects that there is room for improvement in consistently prioritizing content and reinforcing learning goals across multigrade settings. Overall, these findings reflect teachers' competence in engaging students and providing collaborative learning opportunities yet highlight areas where more diverse and targeted instructional methods may enhance learning outcomes further.

Table 5.2. Extent of Utilization of Differentiated Activities and Instructional Materials as Rated by Teachers

Indicators	M	SD	I
1. Provide learning activities and materials that are appropriate to the learner's age/grade, ability levels, interests, and learning styles.	3.99	.75349	GE
2. Provide learning activities by which pupils can engage in or make sense of the content based on their interests or needs, learning styles, etc.	4.00	.75359	GE
3. Provide pupils with appropriately challenging learning tasks (e.g., questioning, student work).	3.97	.67972	GE
4. Use technology (such as iPads, laptops, smartphones, smart TVs, computers, OHP, LCD, and the internet) to teach the lesson to enhance learning.	3.44	1.19172	GE
5. Use contextualized materials to reinforce learning.	3.77	.79583	GE
Average	**3.83**	**.83487**	**GE**

The study evaluated teachers' self-reported practices to the extent to which they use differentiated activities and instructional materials to support teaching in multigrade classrooms. Table 5.2 presents the average ratings provided by teachers across several indicators, focusing on how well learning activities and materials are tailored to student needs, abilities, and learning styles.

The average rating for the utilization of differentiated activities and instructional materials was 3.83 (SD = 0.83487), with teachers demonstrating a generally effective approach to using differentiated resources. The highest-rated indicators were "Provide learning activities that pupils can engage in based on their interests or needs" (M = 4.00, SD = 0.75359), "Provide learning activities and materials appropriate to the learner's age/grade, ability levels, interests, and learning styles" (M = 3.99, SD = 0.75349), and "Provide pupils with appropriately challenging learning tasks" (M = 3.97, SD = 0.67972). These scores indicate that teachers are largely successful in tailoring activities and materials to meet diverse student needs in multigrade classrooms.

Similarly, "Use contextualized materials to reinforce learning" (M = 3.77, SD = 0.79583) indicates that while contextualization is generally practiced, application may be needed. However, the indicator "Use technology to teach the lesson to enhance learning" received a lower rating (M = 3.44, SD = 1.19172), suggesting that teachers may face challenges in integrating technology into their instruction, due to limited access to devices or training.

Overall, these findings reflect that teachers are effective in providing differentiated activities and instructional materials. However, they may benefit from additional support and resources to enhance technology integration and contextualization in their classrooms.

Table 5.3. Extent of Utilization of Differentiated Assessment Strategies and Techniques to Measure the Learning Performance of Students as Rated by Teachers

Indicators	M	SD	I
1. Align student assessment with the K to 12 curriculum standards and competencies prescribed for each grade.	4.09	.73197	GE
2. Use a variety of assessment strategies throughout the lesson (e.g., informal checks, questions, observation, assignments).	3.93	.76278	GE
3. Provide differentiated assessment tasks to pupils to check for understanding of the lesson.	3.93	.70762	GE
4. Provide assessment tasks that are sensitive to pupil diversity (interest, ability, learning styles, culture).	3.83	.70504	GE
5. Allow pupils to demonstrate understanding of the lesson using different mediums (for example, presenting information through a video clip as opposed to a written piece, role play, dance, and other performance tasks).	3.83	.92472	GE
6. Use assessment tools for both formative and summative purposes to inform, guide, and adjust pupils' learning.	4.07	.71258	GE
7. Modify assessment tasks to accommodate pupils' learning needs.	3.94	.70493	GE
8. Involve pupils in monitoring their own progress.	4.00	.72433	GE
9. Give constructive and frequent feedback to pupils on their learning.	4.03	.74056	GE
Average	**3.96**	**.74605**	**GE**

The study examined the extent to which teachers use differentiated assessment strategies and techniques to evaluate student learning in multigrade classrooms. Table 5.3 summarizes the ratings provided by teachers across several indicators related to assessment practices.

The average rating for the use of differentiated assessment strategies and techniques was 3.96 (SD = 0.74605), indicating that teachers are generally effective in applying varied assessment methods to evaluate student learning in multigrade classrooms. The highest-rated indicator was "Align student assessment with the K to 12 curriculum standards and competencies" (M = 4.09, SD = 0.73197), showing that teachers are adept at ensuring assessments are aligned with curriculum goals.

Other indicators, such as "Use assessment tools for both formative and summative purposes" (M = 4.07, SD = 0.71258) and "Give constructive and frequent feedback to pupils" (M = 4.03, SD = 0.74056), suggest that teachers effectively use assessments to monitor progress and guide student learning. However, slightly lower scores for indicators such as "Provide assessment tasks that are sensitive to pupil diversity" (M = 3.83, SD = 0.70504) and "Allow pupils to demonstrate understanding through different mediums" (M = 3.83, SD = 0.92472) highlight opportunities for teachers to expand their use of diverse, culturally responsive, and flexible assessment methods.

Classroom Management

The study evaluated teachers' self-reported practices in managing the multigrade learning environment with differentiated strategies. Table 6 presents the average ratings provided by teachers across various indicators, focusing on how effectively they apply differentiation principles in managing a classroom with diverse student needs.

Table 6. Extent of Managing Differentiated Multigrade Learning Environment as Rated by Teachers

Indicators	M	SD	I
1. Arrange tables and seats to accommodate pupils' work and learning needs.	4.38	.71327	VGE
2. Establish classroom rules and procedures, expectations, and routines that are enforced consistently and fairly.	4.33	.71045	VGE
3. Establish teacher's schedules that indicate a systematic plan for the lesson's activities.	4.09	.72699	GE
4. Practice the teacher's role as a facilitator and participant in the teaching and learning process.	4.14	.74434	GE
5. Use grouping strategies in a variety of ways (e.g., whole group, small groups, partners, heterogeneous and homogeneous groups) with tasks designed to learn the necessary skills expected from the group activity.	4.13	.74657	GE
6. Interact with all of the different groups during the course of the lesson.	4.10	.73042	GE
7. Monitor group participation and involvement to ensure pupils' learning progress and provide feedback.	4.22	.71167	VGE
8. Use learning centers as pupils' workstations based on interests, needs, or choices.	3.79	.90091	GE
9. Maximize instructional learning time by giving equal time to work with learners individually as well as in small groups or whole groups.	3.98	.86404	GE
10. Promote a child-friendly learning environment where everyone feels valued and recognized.	4.48	.64154	VGE
Average	**4.16**	**.74902**	**GE**

The average rating for classroom management practices in a differentiated multigrade setting was 4.16 (SD = 0.74902), indicating that teachers are generally effective in creating a well-managed, inclusive learning environment. The highest-

rated indicators verbally interpreted as Very Great Extent, "Promote a child-friendly learning environment where everyone feels valued and recognized" (M = 4.48, SD = 0.64154), "Teachers arrange tables and seats to accommodate pupils' work and learning needs" (M = 4.38, SD = 0.71327), and "Establish classroom rules and procedures, expectations, and routines that are enforced consistently and fairly" (M = 4.33, SD = 0.71045), highlights teachers' success in establishing a supportive classroom atmosphere.

However, "Use learning centers as pupils' workstations based on interests, needs, or choices" (M = 3.79, SD = 0.90091) received a lower rating, suggesting that while teachers are generally effective in managing classrooms, there may be limitations in setting up learning centers tailored to individual preferences. Similarly, teachers could benefit from additional strategies for maximizing instructional time across different group configurations.

Degree of Teacher-Pupil Relationship in a Multigrade Differentiated Learning Environment

Table 7 presents the respondents' ratings on the degree of teacher-pupil relationship in a multigrade differentiated learning environment.

Table 7. Degree of Teacher-Pupil Relationship in a Multigrade Differentiated Learning Environment as Rated by Teachers

Indicators	M	SD	I
1. Establish a climate of trust and teamwork by being fair, caring, respectful, and enthusiastic to everyone.	4.46	.68714	VGE
2. Respect each other's diversity, including but not limited to language, culture, race, gender, religion, and special needs.	4.48	.68797	VGE
3. Actively listen and pay attention to pupils' needs and responses.	4.42	.66570	VGE
4. Promote a climate of trust and teamwork within the classroom.	4.34	.70606	VGE
5. Create a culture of collaboration and ownership in the classroom.	4.23	.68105	VGE
6. Maximize instructional learning time by working with pupils individually as well as in small groups or whole groups.	4.12	.72668	GE
7. Avoid having favorites and set aside any feelings of dislike for particular pupils.	4.43	.67558	VGE
Average	**4.36**	**.69002**	**VGE**

Table 7 presents the degree of teacher-pupil relationship in a multigrade differentiated learning environment, as rated by teachers. The overall mean rating is 4.36 (SD = 0.69002), indicating that teachers perceive their relationships with pupils to be Very Great Extent (VGE). The indicators are arranged from highest to lowest mean, showcasing areas where teachers excel and where further enhancement may be needed.

The highest-rated indicator is "Respect each other's diversity, including but not limited to language, culture, race, gender, religion, and special needs" (M = 4.48, SD = 0.68797), suggesting that teachers highly prioritize inclusivity and respect for diversity in their classrooms. Similarly, teachers strongly agree that they "Establish a climate of trust and teamwork by being fair, caring, respectful, and enthusiastic to everyone" (M = 4.46, SD = 0.68714), reinforcing their commitment to fostering a positive and supportive learning environment.

The indicator "Avoid having favorites and set aside any feelings of dislike for particular pupils" also received a high rating (M = 4.43, SD = 0.67558), reflecting teachers' commitment to maintaining fairness and equity in their interactions with students. Likewise, "Actively listen and pay attention to pupils' needs and responses" (M = 4.42, SD = 0.66570) highlights teachers' attentiveness and responsiveness to students' concerns.

Meanwhile, "Promote a climate of trust and teamwork within the classroom" (M = 4.34, SD = 0.70606) and "Create a culture of collaboration and ownership in the classroom" (M = 4.23, SD = 0.68105) indicate that while teachers successfully cultivate a sense of belonging and teamwork, there may still be opportunities to strengthen collaborative learning and student engagement further.

The lowest-rated indicator, "Maximize instructional learning time by working with pupils individually as well as in small groups or whole groups" (M = 4.12, SD = 0.72668), though still rated as Great Extent (GE), suggests that teachers might benefit from additional strategies to ensure that learning time is effectively utilized across different group configurations. This finding aligns with challenges in multigrade classrooms, where balancing individual and group instruction can be demanding due to varying student abilities, lesson pacing, and classroom management complexities.

Overall, the findings demonstrate that teachers are highly effective in establishing positive teacher-pupil relationships, particularly in fostering trust, fairness, and inclusivity. However, continuous professional development and classroom management strategies may further enhance teachers' ability to maximize instructional time and strengthen collaboration in multigrade differentiated learning environments.

Significant Relationship between the Extent of DI Implementation and the Degree of Teacher-Pupil Relationship

Table 8 presents the results of Pearson Correlations on significant relationships between and among instructional planning, instructional delivery, classroom management, and teacher-pupil relationships in the implementation of differentiated instruction.

Table 8. Significant Relationships of Instructional Planning, Instructional Delivery, Classroom Management, and Teacher-Pupil Relationship in the Implementation of Differentiated Instruction

Instructional Planning	Pearson Correlation	Sig. (2-tailed)	Interpretation
Instructional Delivery	.839**	.000	Significant
Classroom Management	.719**	.000	Significant
Teacher-pupil Relationship	.621**	.000	Significant

** Correlation is significant at the 0.01 level (2-tailed)

Instructional Delivery	Pearson Correlation	Sig. (2-tailed)	Interpretation
Instructional Planning	.839**	.000	Significant
Classroom Management	.794**	.000	Significant
Teacher-pupil Relationship	.696**	.000	Significant

** Correlation is significant at the 0.01 level (2-tailed)

Classroom Management	Pearson Correlation	Sig. (2-tailed)	Interpretation
Instructional Planning	.719**	.000	Significant
Instructional Delivery	.794**	.000	Significant
Teacher-pupil Relationship	.799**	.000	Significant

** Correlation is significant at the 0.01 level (2-tailed)

Teacher-pupil Relationship	Pearson Correlation	Sig. (2-tailed)	Interpretation
Instructional Planning	.621**	.000	Significant
Instructional Delivery	.696**	.000	Significant
Classroom Management	.799**	.000	Significant

** Correlation is significant at the 0.01 level (2-tailed)

Overall, the results reveal a strong relationship among these four variables: Planning, Instruction, Classroom Management, and Teacher-Pupil Relationship at a 0.01 level of significance. This suggests that the effectiveness of instruction (r = .839), classroom management (r = .719), and teacher-pupil relationships (r = .621) is associated with a higher level of a teacher's competence in instructional planning. This also suggests that effective instructional planning is strongly linked to a significant improvement in instruction, classroom management, and teacher-pupil relationships.

Discussion

Differentiated Multigrade Instruction Practices Model

This article has outlined the three key components of teaching that are essential for promoting effective differentiated multigrade instruction, namely, instructional planning, instructional delivery, and classroom management. The participants emphasized the importance of understanding and establishing measures and indicators for each teaching components to improve the implementation of differentiated instruction in multigrade schools. Research supports the significance of structured differentiation in addressing diverse learning needs, optimizing teacher effectiveness, and improving student outcomes in multigrade settings (Goyibova et al., 2025; Kalinowski et al., 2024).

Instructional planning, as discussed in this study, involves the systematic planning and preparation of differentiated multigrade lesson plans using the necessary instructional resources and techniques. The establishment of measures and competencies is crucial for assessing teachers' knowledge and skills in planning and designing multigrade differentiated instructional plans in alignment with the national curriculum. This planning process requires the teacher's ability to identify lesson objectives from the K to 12 Curriculum and translate curriculum content into learning activities that cater to individual learning needs based on formal and informal assessments of students' learning and principles of differentiated instruction. Teachers are expected to apply professional knowledge to plan and design multigrade lessons that incorporate instructional and assessment strategies and resources to facilitate students' participation in the class, understanding of concepts, and achievement of learning objectives across grade levels.

The instructional delivery component assesses teachers' ability to differentiate instruction using a wide range of instructional and assessment strategies, along with learning resources, including multimedia materials. This is done to

accommodate differences among students and ensure that every student has the chance to master the lesson being taught. It is expected that teachers will utilize developmentally appropriate strategies and resources to engage students and actively enhance their learning experience.

The classroom management component assesses the teacher's proficiency in establishing, communicating, and maintaining clear expectations for student behavior using effective routines, procedures, and techniques. These strategies aimed to consistently motivate students to actively participate and sustain their interest in learning activities within a multigrade classroom setting. In managing multigrade classrooms, teachers should create an environment conducive to learning by establishing behavioral norms, strategically planning the utilization of classroom space, designing engaging activities, and effectively utilizing teaching and learning materials. This comprehensive approach ensures that students are fully engaged and motivated to excel academically.

Instructional Planning

The study's findings on instructional planning reveal that teachers are generally effective in designing differentiated lesson plans that align with curriculum standards and address diverse student needs in multigrade settings. Effective instructional planning ensures that lesson objectives, instructional strategies, and assessments are carefully structured to accommodate students at varying levels of readiness and ability (Goyibova et al., 2025; Kalinowski et al., 2024).

Teachers scored highly in aligning lesson objectives with the K to 12 curriculum, indicating that they prioritize structured lesson designs that meet educational standards. Research suggests that curriculum alignment is essential in differentiated instruction (DI) as it ensures that all students, regardless of their grade level, engage with essential learning outcomes (Khasinah, 2025; Magableh & Abdullah, 2022). Effective alignment also helps maintain instructional coherence across grade levels, which is particularly critical in multigrade classrooms, where teachers simultaneously manage multiple curricula (Pozas et al., 2020).

The moderately high rating for using formative assessment data to plan differentiated instruction suggests that teachers are committed to adapting their lesson plans based on student readiness. Research supports this approach, as ongoing assessment allows teachers to modify instruction based on real-time student progress, improving learning outcomes (Nguyen & Habók, 2023). In multigrade settings, such formative assessment practices are essential in identifying and addressing diverse student needs within a single classroom (Shareefa, 2022).

However, the relatively lower score for developing differentiated learning plans across grade levels highlights the challenges teachers face in planning activities that address individual and group needs. Studies indicate that multigrade teachers often struggle to provide individualized attention due to time constraints, workload demands, and the complexity of balancing multiple curricula (Mengistie, 2020; Uerz et al., 2017). This finding suggests that while teachers understand the principles of differentiation, they may require additional training, instructional resources, and structured planning tools to implement customized learning strategies in multigrade classrooms effectively (Kalinowski et al., 2024; Starkey, 2020).

Instructional Delivery: Differentiated Instructional Strategies and Approaches

The findings indicate that teachers demonstrate a generally effective use of differentiated instructional strategies, particularly in providing collaborative and learner-centered learning opportunities. Teachers prioritize active learning and student engagement, which are fundamental components of DI in multigrade settings. Research supports this approach, emphasizing that student-centered instruction improves learning outcomes by encouraging peer collaboration, interactive activities, and real-world applications of knowledge (Goyibova et al., 2025; Kalinowski et al., 2024). Studies further suggest that fostering a collaborative learning environment benefits students of varying academic levels, allowing for differentiated pacing and scaffolding based on individual learning needs (Pozas et al., 2020).

Teachers also employ differentiated instructional strategies to ensure that students can access content in ways that suit their learning preferences and abilities. Research highlights the importance of multimodal teaching approaches, such as integrating visual, auditory, and kinesthetic learning techniques, to enhance comprehension and retention in heterogeneous classrooms (Nguyen & Habók, 2023). However, despite these strengths, the findings suggest that teachers could further refine their strategies in prioritizing essential content to ensure that core learning objectives are consistently reinforced across grade levels. The challenge of maintaining curriculum alignment across different grade levels is a known barrier in multigrade classrooms, requiring additional professional development and instructional resources to streamline content differentiation effectively (Khasinah, 2025; Magableh & Abdullah, 2022).

While teachers demonstrate competence in engaging students and facilitating active learning, there is room for further enhancement in the precision and diversity of instructional methods used in differentiated classrooms. Research suggests that ongoing professional development focusing on curriculum prioritization, adaptive teaching strategies, and technology integration can further enhance instructional delivery in multigrade settings (Shareefa, 2022; Starkey, 2020). By equipping teachers with structured planning tools, digital resources, and collaborative teaching models, educators can effectively tailor learning experiences to meet the diverse needs of students in multigrade classrooms.

Instructional Delivery: Differentiated Activities and Instructional Materials

Teachers demonstrate a generally effective approach to using differentiated instructional resources to accommodate diverse student needs in multigrade classrooms. The findings indicate that teachers successfully provide learning activities and materials tailored to students' interests, abilities, and learning styles. Research supports this practice, emphasizing that DI improves student engagement and learning outcomes by offering customized tasks that match individual readiness levels (Goyibova et al., 2025; Kalinowski et al., 2024). The ability to design appropriately challenging learning experiences enables teachers to foster a more inclusive and adaptive learning environment (Pozas et al., 2020).

Despite these strengths, the findings suggest that contextualized learning materials, while generally utilized, could be applied more consistently and effectively. Studies highlight that contextualization enhances comprehension by linking lesson content to real-world experiences, making learning more relevant and meaningful for students (Chapman & King, 2014; Magableh & Abdullah, 2022; Shareefa, 2022). However, a notable challenge in multigrade classrooms is the integration of technology into instruction. Teachers face difficulties in leveraging digital tools for differentiated learning, which could be attributed to limited access to technology, inadequate training, or infrastructure constraints (Nguyen & Habók, 2023; Starkey, 2020).

While teachers effectively implement differentiated learning activities, there is an opportunity to enhance technology integration and contextualized instructional materials in multigrade settings. Research suggests that increased access to educational technology, targeted professional development, and curriculum support could further strengthen instructional differentiation (Khasinah, 2025). By equipping educators with interactive digital resources and training on adaptive teaching models, schools can maximize the effectiveness of differentiated instruction in diverse classroom settings.

Instructional Delivery: Differentiated Assessment Strategies and Techniques

Teachers demonstrate a generally effective application of differentiated assessment strategies to evaluate student learning in multigrade classrooms. A key strength of their assessment practices is alignment with the K to 12 curriculum standards and competencies, ensuring that evaluations reflect national learning objectives. The research underscores the importance of curriculum-aligned assessments in guiding instruction and ensuring that all students meet essential learning outcomes, particularly in diverse classroom settings (Khasinah, 2025; Pozas et al., 2020).

In addition to curriculum alignment, teachers effectively use both formative and summative assessments to monitor student progress and adjust instruction accordingly. Studies indicate that integrating multiple assessment forms—such as quizzes, observations, portfolios, and performance-based tasks—provides a more comprehensive understanding of student learning (Magableh & Abdullah, 2022). Furthermore, the frequent provision of constructive feedback supports student growth and motivation, as timely and specific feedback enhances learning engagement and self-regulation (Goyibova et al., 2025; Kalinowski et al., 2024).

Despite these strengths, there is room for expanding assessment diversity to accommodate student differences better. The findings suggest that while teachers acknowledge the need for inclusive and culturally responsive assessments, their implementation of assessment tasks sensitive to pupil diversity remains an area for growth. Research highlights that differentiated assessment methods—such as allowing students to demonstrate understanding through multiple formats, including written, oral, visual, and kinesthetic tasks—are essential for addressing varied learning styles and abilities (Nguyen & Habók, 2023; Shareefa, 2022). However, teachers may require additional training and resources to design assessments that are both equitable and adaptable in multigrade classrooms (Starkey, 2020).

Overall, while teachers effectively align assessments with curriculum standards, utilize varied evaluation tools, and provide meaningful feedback, further professional development in differentiated and culturally responsive assessments could strengthen inclusive evaluation practices in multigrade settings. Future efforts should focus on enhancing teacher capacity to develop flexible and multimodal assessment techniques that cater to diverse student needs and learning profiles (Uerz et al., 2017).

Classroom Management

Teachers demonstrate generally effective classroom management practices in multigrade learning environments, ensuring a structured, inclusive, and child-friendly atmosphere. A key strength in their management strategies is their ability to promote a positive learning environment where students feel valued and recognized. Research highlights that fostering a supportive classroom climate significantly enhances student engagement, cooperation, and academic performance, particularly in DI settings (Goyibova et al., 2025; Kalinowski et al., 2024). Establishing clear classroom rules, expectations, and routines is also critical, as consistency in these areas contributes to student autonomy, self-discipline, and smoother transitions between activities (Pozas et al., 2020).

Additionally, teachers effectively arrange seating and workspace configurations to accommodate students' diverse learning needs. Studies emphasize the importance of flexible seating arrangements in supporting collaborative learning, individualized instruction, and student-centered approaches, particularly in multigrade classrooms where diverse

learning levels must be addressed simultaneously (Nguyen & Habók, 2023; Shareefa, 2022). Properly arranged learning environments contribute to improved classroom flow, increased student interaction, and efficiently used instructional time (Starkey, 2020).

Moreover, there is room for growth in implementing learning centers as pupils' workstations tailored to their interests and needs. Research suggests that learning centers provide an opportunity for self-directed exploration, differentiated instruction, and increased student engagement, making them particularly beneficial in multigrade settings (Magableh & Abdullah, 2022). However, challenges such as time constraints, resource availability, and classroom space limitations may hinder their widespread use. Teachers may benefit from additional strategies and professional development on maximizing instructional time across different group configurations, ensuring that learning centers effectively cater to diverse learners while maintaining overall classroom structure (Khasinah, 2025; Uerz et al., 2017). In summary, while teachers excel in creating a well-managed and inclusive learning environment, further enhancements in differentiated classroom management strategies, particularly in the use of learning centers and flexible groupings, could further optimize student learning experiences in multigrade classrooms.

Conclusion

This study provides a comprehensive assessment of the effectiveness of DI practices in multigrade classrooms in the Philippines, focusing on instructional planning, delivery, assessment, and classroom management. Findings indicate that teachers are proficient in implementing DI, particularly in aligning their lesson objectives with the K to 12 curriculum, facilitating active and collaborative learning, and managing diverse learning needs in a positive, child-centered environment. These practices demonstrate teachers' commitment to meeting the unique challenges of multigrade classrooms, with strengths in organizing lessons, engaging students in meaningful activities, and providing supportive classroom structures.

However, certain areas reveal ongoing challenges, such as consistently developing differentiated learning plans for each grade level, maximizing the use of technology, and creating culturally responsive assessment tasks that cater to the diversity of learners. Teachers also face limitations in utilizing diverse instructional resources and in maximizing instructional time across individual and group activities, highlighting the need for further professional development and resource support in these areas.

The DI Assessment Checklist developed through this study serves as a practical tool to support teachers in evaluating and improving their differentiated practices across planning, delivery, and classroom management. This checklist offers teachers, principals, and educational supervisors a structured means of assessing DI effectiveness, guiding reflective teaching practices, and providing constructive, non-evaluative feedback that fosters professional growth. Regular use of this checklist can help educators identify areas for improvement, establish a culture of reflective teaching, and ultimately enhance instructional practices for diverse learners in multigrade settings.

In conclusion, implementing DI in multigrade classrooms is both challenging and rewarding. The process needs careful planning, adaptability, and unwavering dedication. However, with the appropriate tools, resources, and ongoing support, teachers can continue to build on their strengths, address areas for improvement, and effectively navigate the complexities of multigrade instruction. This, in turn, not only improves instructional outcomes but also contributes to advancing educational equity and fostering more positive teacher attitudes and behaviors toward differentiated teaching.

Recommendations

The study recommends that to strengthen the integration and effectiveness of DI in multigrade classrooms, the DepEd should implement policy-level interventions focused on teacher preparation, professional development, instructional resources, and assessment strategies. In collaboration with the Commission on Higher Education (CHED) and teacher education institutions (TEIs), DepEd should mandate the inclusion of DI theories, strategies, and assessment methods in pre-service teacher education curricula, ensuring that future educators are equipped with the necessary competencies for implementing DI effectively.

To enhance teacher capacity in instructional planning, delivery, assessment, and classroom management, professional development programs should be expanded to address specific challenges identified in this study. Workshops and training sessions should focus on designing differentiated learning plans that cater to multiple grade levels and diverse student needs, maximizing instructional time, and improving teachers' ability to organize both individual and group learning activities. Training should also emphasize culturally responsive practices, acknowledging student diversity and promoting inclusive teaching approaches.

In addition to professional development, improving access to technology and instructional resources is critical. Many multigrade teachers face barriers to fully implementing DI due to limited access to digital tools and instructional materials. Equipping classrooms with digital devices, multimedia resources, and adaptable learning materials would empower teachers to deliver varied and engaging content that meets the diverse needs of learners. Additionally, providing training on educational technology would enable teachers to use these tools effectively, enhancing student engagement and broadening learning opportunities.

A systematic approach to assessment should also be developed, ensuring that DI strategies are sensitive to students' cultural backgrounds and learning modalities. DepEd should provide resources and training to help teachers design inclusive assessment tasks that allow students to demonstrate learning through multiple formats, such as presentations, creative projects, and group work. Promoting flexible and culturally responsive assessments will provide a more comprehensive view of student progress and support a more equitable learning environment.

Furthermore, DepEd should promote reflective teaching practices by institutionalizing the DI Performance Appraisal Tool developed in this study. This tool can serve as a supportive, non-evaluative instrument for teachers, principals, and educational supervisors to assess instructional planning, delivery, and classroom management in multigrade classrooms. Using this tool allows teachers to identify strengths, pinpoint areas for improvement, and foster a culture of continuous professional growth in DI practices.

By implementing these policy recommendations, DepEd can ensure that teachers are equipped with the skills, resources, and support necessary for effective DI implementation in multigrade classrooms. These initiatives will contribute to a culture of reflective, student-centered education that benefits diverse learners in Philippine multigrade settings.

Limitations

This study, while comprehensive in assessing the effectiveness of DI in multigrade classrooms, has several limitations that should be considered when interpreting the findings. One primary limitation is the study's reliance on self-reported data from teachers regarding their instructional planning, delivery, and classroom management practices. Self-reported data can be influenced by subjective biases, such as social desirability bias, where respondents may portray their teaching practices in a more favorable light. As a result, the findings may reflect teachers' perceived practices rather than their actual behaviors in the classroom.

The sampling scope is another limitation. While the study included a diverse sample of teachers from various regions in the Philippines, it may not represent all multigrade classrooms across the country, particularly those in more remote or underserved areas that could face unique challenges. Future studies should conduct comparative regional analyses to determine whether differences exist in teacher preparedness, instructional strategies, and access to DI-related resources. Additionally, the research could investigate how regional DepEd offices adapt and implement DI policies in response to localized needs, ensuring that training programs and instructional support are equitably distributed across different urban and rural settings.

The study did not directly observe classroom practices, which limits the ability to verify the effectiveness of DI implementation objectively. While the DI Assessment Checklist provides a useful self-assessment tool, classroom observations would have allowed for a more detailed, objective analysis of how DI practices are applied in real-time, adding depth to the data.

Furthermore, the study lacks direct measures of student outcomes to assess the impact of DI practices on learning achievements. Without data on student performance, it is difficult to determine the direct effectiveness of DI strategies in improving student learning in multigrade settings.

Finally, resource limitations in terms of time and access to technology may have influenced the extent to which teachers could fully implement DI practices. Many schools in the Philippines, particularly in rural areas, face challenges in accessing educational technology, which is an important component of DI. Thus, the study may not fully capture the impact of limited resources on DI implementation.

Ethics Statements

The study involved human subjects and was reviewed and approved by the Ethics and Review Committee of the University of Santo Tomas Graduate School. The participants signed an informed consent to participate in the study.

Conflict of Interest

The researcher funded the study. This shows that there was no conflict of interest on the part of the author.

Generative AI Statement

This study acknowledges the use of ChatGPT (OpenAI, 2025) as a generative AI tool to assist in language refinement, content organization, and clarity enhancement. Specifically, ChatGPT was utilized to rephrase sentences for coherence, improve readability, and structure discussions based on peer review feedback. However, all conceptualizations, analyses, interpretations, and conclusions presented in this article remain the sole responsibility of the author. The use of AI did not involve the generation of original research content, data analysis, or critical academic arguments. The author affirms compliance with ethical guidelines and AI usage conditions, ensuring that the final manuscript reflects their scholarly work and intellectual contributions.

Authorship Contribution Statement

Bunga: Conceptualization, design, data gathering, analysis, writing, drafting, and finalizing the manuscript.

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