

Extent of Differentiated Instruction Implementation Among Teachers in Public Elementary Schools of Santa Fe District, Nueva Vizcaya

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Abstract

This study sought to understand the extent to which differentiated instruction is implemented by teachers in public elementary schools within the Santa Fe District, Nueva Vizcaya, during the School Year 2025–2026. Specifically, it explored the respondents' profiles, their perceptions of differentiated instruction, the instructional strategies they employed, the learning settings, the areas of differentiated instruction, the challenges they encountered, and the relationship between respondents' profile variables and the implementation of differentiated instruction. This study employed a descriptive-correlational research design and utilized a researcher-made questionnaire as the primary data-gathering instrument. A complete enumeration was conducted involving twenty-eight (28) Grade 1 and Grade 2 teachers from public elementary schools in the district. Frequency counts, percentages, weighted means, standard deviations, and Pearson's r correlation analysis were used to analyze the gathered data. The findings indicate that teachers hold positive perceptions of differentiated instruction and frequently employ varied instructional strategies and learning settings in their classrooms. Assessment, instructional strategies, and learner-centered activities were identified as important components for addressing diverse learner needs. Although teachers faced challenges such as limited instructional resources and classroom diversity, they were manageable. Furthermore, educational attainment, performance rating, present position, and training attended showed significant relationships with the implementation of differentiated instruction. The study concluded that differentiated instruction is an effective teaching approach that promotes learner engagement, participation, and academic performance among elementary pupils in diverse classroom settings.

Keywords: Differentiated Instruction, Instructional Strategies, Learning Settings, Elementary Teachers, Learner-Centered Education

1. Introduction

Differentiated instruction (DI) is a key strategy in today's classrooms. It is all about meeting the diverse needs, abilities, interests, and learning styles of students. By focusing on each student's readiness and preferences, teachers can adjust what they teach, how they teach it, and how they assess learning (Ramaila, 2025). Educators worldwide have realized that the traditional "one-size-fits-all" approach is no longer effective. Studies have shown that DI boosts students' academic performance, motivation, engagement, and participation in various educational settings (Am et al., 2023; Goyibova et al., 2025). Moreover, it supports equity and inclusion by providing meaningful learning experiences for all students, regardless of their abilities or backgrounds (Bakogiannis & Papavasiliou, 2025). In the Philippines, the Department of Education promotes learner-centered and inclusive education. They do this by using different teaching strategies and implementing instructional reforms (Bunga et al., 2025). However, many public elementary school teachers still face hurdles when implementing differentiated instruction (DI). This is mainly because of large class sizes, limited resources, insufficient training, and the diverse needs of learners (Princess Zarla J. Raguindin et al., 2021). These challenges are especially noticeable in public elementary schools, where teachers work with students with different readiness levels and learning styles. In Santa Fe District, Nueva Vizcaya, teachers of Grades 1 and 2 are trying out various DI strategies, learning settings, and instructional practices to support their diverse learners (DLs). However, they still struggle with issues such as time, resources, and classroom management, which affect the effectiveness of their implementation of these strategies.

Even though differentiated instruction is becoming more important, there aren't many local studies focusing on how it's being implemented by public elementary school teachers in Santa Fe District, Nueva Vizcaya. Most previous studies have examined student performance rather than teachers' perceptions, instructional practices, and the challenges they face with DI. Moreover, there has been little research on how teachers' profile variables relate to DI implementation in this local context. Therefore, this study was set up to explore the extent of differentiated instruction being implemented by Grade 1 and Grade 2 teachers in the public elementary schools of Santa Fe District, Nueva Vizcaya.

2. Material and methods

2.1 Research Design

This study adopted a descriptive-correlational approach to explore how teachers in public elementary schools in Santa Fe District, Nueva Vizcaya, implemented differentiated instruction. We used a descriptive method to obtain a clear picture of how teachers perceive this approach, the strategies they use, the learning environments they create, and the challenges they face. On the other hand, the correlational method helped us examine how different aspects of the teachers' profiles relate to how they implement differentiated instruction. This research design was a good fit because it allowed us to collect quantitative data systematically and objectively without manipulating any variables.

2.2 Locale of the Study

This study was conducted in public elementary schools in the Santa Fe District, Nueva Vizcaya, Philippines, during the 2025–2026 school year. The locale was selected because it consists of diverse public elementary schools where teachers implement different instructional strategies to address pupils' varied learning needs. The district provides a suitable setting for examining the implementation of differentiated instruction among Grade 1 and 2 teachers.

2.3 Respondents of the Study

The respondents of the study were Grade 1 and Grade 2 teachers from public elementary schools in Santa Fe District, Nueva Vizcaya. The teachers were selected because they were directly involved in classroom instruction and the implementation of differentiated teaching strategies. The respondents varied in terms of age, gender, civil status, present position, educational attainment, performance rating, and level of training attended. Their responses provided valuable information regarding differentiated instruction practices in elementary school classrooms.

2.4 Sample and Sampling Procedure

This study utilized complete enumeration as the sampling procedure. All twenty-eight (28) Grade 1 and Grade 2 teachers from the public elementary schools in Santa Fe District were included as respondents. Complete enumeration was employed because the total population was manageable and allowed all qualified teachers to participate in this study. This sampling technique ensured that all members of the target population were represented, thereby increasing the reliability of our findings.

2.5 Research Instrument

The primary instrument used to gather data was a researcher-made questionnaire based on an extensive review of related literature and studies on differentiated instruction. The questionnaire consisted of different parts, including the respondents' profile, perceptions regarding differentiated instruction, instructional strategies, learning settings, areas of differentiated instruction, and problems encountered in implementation. A five-point Likert scale was used to measure participants' responses. Prior to the actual conduct of the study, the questionnaire was validated by experts and revised based on the comments and suggestions gathered during the try-out process to ensure clarity, reliability, and validity of the instrument.

2.6 Data Gathering Procedure

The researcher first secured approval from the Office of the Schools Division Superintendent and the school principals before conducting this study. After obtaining permission, the researcher personally distributed the questionnaires to the respondents in selected public elementary schools. The purpose of the study and the instructions for completing the questionnaire were clearly explained to the respondents. The completed questionnaires were retrieved, checked for completeness, and organized for subsequent data analysis. Informal interviews were conducted when necessary to support and validate the gathered information.

2.7 Data Analysis Techniques

The data gathered from the questionnaires were tabulated, analyzed, and interpreted using appropriate statistical methods. Frequency counts and percentages were used to describe the respondents' profiles. Weighted mean and standard deviation were employed to determine the respondents' perceptions of differentiated instruction, instructional strategies, learning settings, areas of differentiated instruction, and problems encountered. Pearson's r correlation analysis was used to determine the relationship between the respondents' profile variables and differentiated instruction implementation. The results are presented in tables to facilitate the interpretation and discussion of the findings.

2.8 Ethical Considerations

The study strictly observed ethical standards in the conduct of the research. Permission to conduct the study was obtained from the appropriate authorities before distributing the questionnaires. The respondents were informed of the objectives and significance of the study, and their participation was purely voluntary. The confidentiality and anonymity of the respondents were maintained throughout the study, and all information gathered was used solely for academic and research

purposes. The researcher ensured honesty, respect, and academic integrity in the collection, analysis, and presentation of the data.

3. Results and Discussion

3.1 Profile of the Respondents

The respondents' demographic and professional characteristics, including gender, age, civil status, current position, highest educational attainment, performance rating, and level of training attended. The analysis indicates that a significant majority of the respondents were female, representing 85.71% of the total, while males constituted 14.29%. Regarding age distribution, the largest segment fell within the 26–30 age range (25.00 %), followed by the 20–25 and 31–35 age groups (each comprising 21.43 %). In terms of civil status, 75.00% of the respondents were married. Regarding current positions, the majority held the title of Teacher III (64.28 %), suggesting substantial teaching experience and professional progression. Regarding educational attainment, over half of the respondents (57.14 %) possessed a master's degree, underscoring their commitment to professional development and lifelong learning. Additionally, 57.14% of respondents received an "Outstanding" performance rating, reflecting their high levels of teaching proficiency and competence. All respondents participated in district and provincial training sessions, although fewer attended national and international programs. Overall, these findings suggest that the respondents possess the requisite professional qualifications, teaching experience, and training exposure, which may positively impact the effective implementation of differentiated instruction in public elementary schools.

3.2 Teachers' Perceptions on the Areas of Differentiated Instruction

Teachers' perceptions of differentiated instruction components indicate a general consensus on the significance of key elements such as assessment, product, challenging lessons, pupil interest, content, and processes. The average weighted means ranged from 3.55 to 3.68, with low standard deviations suggesting agreement and reliability. Notably, assessment received the highest rating (3.68, SD = 0.12), highlighting teachers' acknowledgment of its vital role in customizing instruction to meet individual learners' needs, consistent with findings that adapting assessments enhances student engagement and learning outcomes (Winarto et al., 2024). Similarly, the focus on challenging lessons and product differentiation reflects teachers' understanding of the necessity to provide appropriately rigorous and varied outputs to accommodate diverse student readiness and interests (Godor, 2021). Research supports that differentiated instruction components—content, process, product, assessment, and learner interest—are essential for effectively addressing varied learner profiles (Ramaila, 2025). However, implementation barriers, such as limited time and resources, may impede full execution despite favorable teacher attitudes (Mansoor et al., 2025). Teachers' perceptions thus reflect both theoretical endorsement and practical considerations, underscoring the need for professional development and systemic support to optimize the efficacy of differentiated instruction in diverse classrooms (Godor, 2021; Obrovská et al., 2023). The overall average weighted mean of 3.60 (SD = 0.15) confirms a positive general teacher outlook toward differentiated instruction.

3.3 Respondents' Perception on Differentiated Instruction

Table 3 illustrates the respondents' perceptions of differentiated instruction. The results indicate an overall average weighted mean of 3.85 (SD = 0.47), categorized as "Agree," suggesting that teachers hold favorable views toward differentiated instruction practices. The highest-rated indicators were "The activities we do in our class help the pupils learn" (WM = 4.67, SD = 0.39) and "Using differentiated instruction techniques in my class has helped the pupils academically" (WM = 4.64, SD = 0.36), both interpreted as "Strongly Agree." This indicates that teachers perceive differentiated instruction as effective in improving learner engagement, participation, and performance. Teachers also agreed that differentiated instruction helped build students' confidence and contributed to their professional growth. Furthermore, technology-integrated and learner-centered instructional approaches have been recognized as effective in enhancing student learning and engagement (Anselmo et al., 2024). However, the statement regarding pupils' awareness of their classroom performance obtained the lowest weighted mean of 2.48 (SD = 0.63), interpreted as "Somewhat Disagree." Overall, the findings suggest that differentiated instruction is positively viewed by teachers and is considered an effective strategy for supporting diverse learners in classrooms. Similar findings were reported by Am et al. (2023) and Ramaila (2025), who emphasized that differentiated instruction enhances student engagement, participation, and academic achievement through learner-centered, inclusive teaching practices.

3.4 Respondents' Perception on the Use of Differentiated Instruction Strategies

Respondents' perceptions paint a vivid picture of the frequent use of differentiated instruction (DI) strategies, with an overall average weighted mean of 3.82 (SD = 0.47), suggesting that teachers "often" weave these strategies into their teaching tapestry to meet the diverse needs of learners. Notably, collaborative structures like the Think-Pair-Share strategy (mean = 4.67, SD = 0.35) and encouraging pupils to propose ideas (mean = 4.64, SD = 0.37) are employed "always," underscoring a vibrant emphasis on active student engagement and peer interaction. This approach is in line with research that champions collaborative and student-centered teaching as a catalyst for motivation and enhanced learning outcomes (Ramaila 2025; Xu et al. 2023). The frequent embrace of educational technology (mean = 4.62, SD = 0.36) resonates with

findings that digitally enriched courses bolster teachers' digital prowess, paving the way for more seamless technology integration in instruction (Köstler & Wolff, 2025). Studies have also revealed that the use of varied instructional materials and learning kits supports differentiated instruction and improves student learning outcomes (Anselmo, 2024). Conversely, the act of sharing personal strengths and weaknesses scored lower (mean = 2.48, SD = 0.61, "seldom"), hinting at a hesitance or limited practice in modeling vulnerability, which may ripple through relational dynamics in classrooms. Creating learning stations, using task cards, interviewing pupils, targeting different senses, and grouping pupils by learning style are often employed, reflecting a kaleidoscope of approaches to address varied learner profiles and preferences (Bunga et al. 2025). These practices carve out differentiated pathways aligned with learner readiness and interests, which are essential for inclusive and effective teaching (Ramaila 2025). Overall, the results affirm that teachers are attuned to and implement a rich tapestry of DI strategies to actively engage learners, although opportunities remain to deepen reflective and relational practices within differentiated instruction frameworks.

3.5 Respondents' Perception on Learning Settings in Differentiated Instruction

Respondents perceived their use of various learning settings in differentiated instruction as frequent, with weighted means ranging from 3.46 to 3.73, suggesting that teachers "often" employ these settings in their teaching. Learning in small groups (3.73, SD = 0.42) and learning directly from a teacher (3.72, SD = 0.44) appeared to be the most commonly used settings, followed by learning in big groups (3.56, SD = 0.50), learning in pairs (3.48, SD = 0.46), and learning independently (3.46, SD = 0.48). The overall average weighted mean of 3.59 (SD = 0.46) seems to confirm a consistent pattern of frequent use across all settings. Research affirms that differentiated instruction effectively employs various learning arrangements to cater to diverse student needs and learning preferences, thereby increasing student engagement and academic achievement (Ramaila 2025). Small group learning, in particular, supports active collaboration and peer interaction, which promotes deeper understanding and motivation (Xu et al., 2023). Direct instruction remains vital for scaffolding and addressing individual learners' needs, especially in contexts that require explicit teaching (Am et al., 2023). Similarly, opportunities for independent learning foster self-regulation and autonomy, which are essential skills in differentiated classrooms that emphasize personalized learning paths (Jingyi & Pamintuan, 2024). Studies have also shown that mobile technology enhances student engagement, participation, and learning outcomes in learner-centered classrooms (Anselmo et al., 2026). The flexible use of multiple learning settings aligns with the best practices in DI, allowing teachers to match instruction to readiness levels, interests, and learning profiles, thereby enhancing educational outcomes across diverse classrooms (Liou et al., 2023; Ramaila, 2025). Thus, teachers' frequent use of varied learning settings reflects a growing understanding and application of DI principles in the classroom environment.

3.6 Respondents' Perception on the Common Problems Encountered in Teaching Using Differentiated Instruction

Table 6 provides a look into what teachers think about the usual hurdles they face when using differentiated instruction. The overall average weighted mean came out to be 2.45 (SD = 0.58), which is seen as "Slightly Serious." This indicates that teachers consider these challenges minor. The biggest issue, according to the data, is the "Lack of availability of educational equipment and instruments," which scored a weighted mean of 2.75 (SD = 0.49). Right behind it is The second most important problem was "One strategy fit all," with a weighted mean of 2.71 (SD = 0.57). Both of these are considered "Moderately Serious," suggesting that teachers often struggle with limited resources and meeting their students' diverse needs. On the other hand, "Students' weak motivation for learning" scored the lowest with a weighted mean of 2.10 (SD = 0.64), also seen as "Slightly Serious." Overall, it seems that while teachers face some obstacles in implementing differentiated instruction, they are manageable. Similar observations were made by Mansoor et al. (2025) and Obrovská et al. (2023), who noted that limited resources, time constraints, and classroom diversity are common challenges in this area.

3.7 Summary of the Extent of Differentiated Instruction Implementation

Table 7 provides a snapshot of how teachers implement differentiated instruction. The results show that "Teachers' Perception on Differentiated Instruction" scored the highest with an average weighted mean of 3.85 (SD = 0.47), which translates to "Agree." Next up is the "Use of Differentiated Instruction Strategies," with an average weighted mean of 3.82 (SD = 0.47), interpreted as "Often." Both "Learning Settings in Differentiated Instruction" and "Areas of Differentiated Instruction" received positive feedback, with average weighted means of 3.59 and 3.60, respectively. On the other hand, "Problems Encountered in Differentiated Instruction" had the lowest score, with an average weighted mean of 2.45 (SD = 0.58), interpreted as "Slightly Serious." Overall, the grand mean of 3.46 (SD = 0.43) suggests that teachers agree on the effective implementation of differentiated instruction and frequently use differentiated strategies and learning settings in their classrooms. These findings align with those of Ramaila (2025) and Goyibova et al. (2025), who highlighted that differentiated instruction fosters inclusive, learner-centered, and effective teaching practices that boost learner engagement and academic success.

3.8 Relationship Between Respondents' Profile and Differentiated Instruction Implementation

Table 8 explores how different aspects of the respondents' profiles relate to their implementation of differentiated instruction. The study found some interesting connections between the two. For instance, factors such as age, current job position, highest level of education, performance ratings, and the amount of training attended all showed significant links

to how well differentiated instruction was put into practice. This is because their p-values were below the 0.05 significance level. Notably, the level of training attended had the highest r-value of 0.412, indicating a strong positive relationship. This means that teachers who participated in more training sessions were better at applying differentiated instruction strategies in their classrooms. However, there was no significant relationship between gender and civil status, as their p-values were above 0.05. Overall, these results suggest that professional qualifications and training play a crucial role in the effectiveness of teachers' implementation of differentiated instruction.

4. Conclusion & Recommendations

The study found that teachers in public elementary schools in the Santa Fe District of Nueva Vizcaya had a positive view of differentiated instruction. They often use various teaching strategies and learning environments. Teachers believe that this approach boosts student engagement, participation, confidence, and academic performance. While they face challenges such as limited resources and diverse classrooms, these issues are usually manageable. The study also highlighted that factors such as teachers' educational background, job position, performance ratings, and training experiences play a role in how differentiated instruction is implemented.

Based on these findings, it is recommended that schools continue to offer seminars, training sessions, and workshops on differentiated instruction to help teachers enhance their teaching methods. School administrators should also provide more instructional materials and classroom support to bolster the use of differentiated instruction. Teachers are encouraged to continue using a variety of teaching strategies and flexible learning activities to meet the diverse needs of their students. Future researchers may wish to explore similar studies in other schools or educational settings to further refine and validate these findings.

It is important to note that this study was limited to Grade 1 and Grade 2 teachers in public elementary schools in the Santa Fe District of Nueva Vizcaya. Data were collected using self-made questionnaires, which relied on the honesty and understanding of the respondents. The study focused only on certain variables related to differentiated instruction and did not include classroom observations or students' academic performance, which might have influenced the overall results.

Compliance with ethical standards

The authors declare no conflict of interest. This study complied with recognized ethical standards for human-participant research by ensuring voluntary participation with informed consent, the right to withdraw without penalty, and strict confidentiality through anonymous, secure, and aggregated data handling. Given the study's non-invasive nature, procedures were non-invasive, and safeguards were observed to minimize discomfort, with guidance to appropriate support services when needed, and required institutional permissions were secured for instrument use and access to academic records.

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