

Assessing teacher practices in adjusting instructional materials and activities for learners with special educational needs

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Abstract

Aim: This study aimed to examine teachers' practices in adjusting instructional materials and activities for learners with special educational needs (LSEs) within the context of inclusive education. It also sought to analyze teachers' profiles, assess their adaptive instructional practices, and determine relationships and differences based on selected variables, with implications for improving teaching strategies and inclusive classroom practices.

Methodology: The study employed a quantitative descriptive-correlational research design. Data were collected from 40 SPED teachers using purposive sampling. A validated researcher-made questionnaire was used as the primary instrument. Data were analyzed using descriptive statistics, Pearson Product-Moment Correlation, and Analysis of Variance (ANOVA).

Results: Findings revealed that teachers consistently practiced adjusting instructional materials and activities, indicating strong engagement in inclusive teaching. However, no significant relationship was found between the adjustment of instructional materials and activities. Significant differences were observed in the adjustment of instructional materials when grouped according to sex, educational attainment, and years of service, while no significant differences were found in the adjustment of instructional activities across profile variables.

Conclusion: The results suggest that while teachers demonstrate strong adaptive practices, there is a need to strengthen the integration between instructional materials and activities. Enhancing this alignment can improve inclusive teaching effectiveness and support better learning outcomes for LSEs.

Keywords: *inclusive education, instructional materials, instructional activities, special educational needs, SPED teachers, Philippines*

INTRODUCTION

Global education systems are increasingly prioritizing the right to education by aligning with UNESCO framework documents that advocate for the full integration of Learners with Special Educational Needs (LSEN) into mainstream classrooms. This pedagogical shift requires teachers to move beyond traditional methods toward flexible instructional designs, specifically through the differentiation of materials and activities (Olayvar, 2022). In the Philippines, this transition is supported by legislative frameworks such as Republic Act No. 11650 and Department of Education Order No. 44, s. 2021 (Gonzaga et al., 2024). However, the success of these policies depends heavily on educational leadership and school management, which serve as the primary conduits for translating policies at the school level. While there are an estimated 2.2 million children with disabilities in the Philippines, only approximately 2% have historically received specialized education services (Masongsong et al., 2023). This gap underscores a systemic failure in school-level resource allocation and the lack of management-led professional development programs tailored to inclusive instructional design.

The implementation of inclusive education is intrinsically linked to curriculum design implications and the teacher's ability to operationalize instructional frameworks. Effective practice requires mastery of differentiation, scaffolding, and the Universal Design for Learning (UDL) model (Beltran et al., 2025). Current curriculum frameworks, such as the MATATAG Curriculum, require a shift from a "one-size-fits-all" approach to a more modular, flexible instructional design. However, the transition has highlighted significant hurdles, including vague implementation



guidelines and a lack of specific training on adapting standard curriculum materials for diverse learners (Torrefiel et al., 2025). Without structured curriculum design implications that mandate the inclusion of adaptive materials at the development stage, teachers are forced to retroactively modify content, often leading to instructional dilution rather than genuine inclusion.

Furthermore, there is a pressing need for instructional innovation that moves beyond general adaptation toward evidence-based technological integration. For instance, the use of gamified mobile applications and digital scaffolds has shown potential to enhance learners' academic performance in mainstream classes (Abenes et al., 2023). Such instructional innovations require school management to foster a digital literacy environment and to provide the necessary Information and Communications Technology (ICT) infrastructure. However, research indicates that teachers are often hamstrung by a lack of institutional support and resource constraints (Calumpang, 2025). Crucially, the extent of adaptive instruction is mediated by individual teacher attributes, with factors such as teaching experience and educational qualifications influencing a teacher's readiness to adopt these innovative instructional designs (Fajardo et al., 2025; Masongsong et al., 2023).

Despite the growing body of literature on inclusive education in the Philippines, a critical research gap remains. Most local studies focus on general teacher attitudes, paying limited attention to the intersection of school management support and the self-evaluation of instructional material modification. Most of these studies fail to distinguish what the teachers believe about inclusion and what they actually do in the classroom when tasked with curriculum implementation. There is a lack of analytical evidence regarding how curriculum frameworks can be practically modified to sustain inclusive practices in diverse classroom settings.

This research examines the relationship between teachers' self-evaluated instructional practices and selected profile variables. Its unique contribution is three-fold: first, it informs policy development by identifying the specific administrative supports teachers need to succeed; second, it provides empirical data to refine curriculum frameworks to be more inclusive by design; and third, it offers a baseline for evidence-based instructional innovation by evaluating current teacher competencies in material modification. By explicitly linking teacher attributes and leadership support to the practical modification of materials, this study offers specific innovations for teacher training programs that aim to bridge the gap between inclusive policy and classroom implementation.

Review of Related Literature and Studies

Inclusive Education and Instructional Adjustment

Inclusive education has more strongly advocated for teaching practices that are responsive to learners' varied instructional needs. Current studies have found that in inclusive classrooms, there is a need for varied instructional strategies, including differentiated instruction, individualized attention, and modifications to instructional materials (Beltran et al., 2025). These practices are based on the principles of Universal Design for Learning, which mandate instructional innovation, where teachers move beyond traditional pedagogy to adopt flexible, learner-centered strategies that accommodate cognitive and physical diversity (Baglieri, 2020).

Several recent studies have verified the importance of Instructional Adaptation as an essential element of inclusive pedagogy (Fajardo et al., 2025). Teachers are expected to adapt the content, processes, and outcomes of learning to learners' abilities, interests, and needs. However, research indicates a trend toward "superficial adaptation," in which educators merely simplify tasks rather than engage in deep curricular innovation, highlighting a critical need for structured instructional design frameworks (Hernández-Herrera et al., 2026; Vindigni, 2023). Crucially, these adjustments are not merely supplementary but are foundational to "curriculum implementation," requiring teachers to redefine the "process and outcomes" of learning to ensure accessibility for all (Torrefiel et al., 2025).

The availability and use of a variety of instructional materials, including visual aids, assistive devices, and interactive learning materials, have been found to improve the participation and learning outcomes of LSEs (Abenes et al., 2023). However, such practice is often constrained by a lack of "instructional innovation," as educators struggle to move beyond basic adaptations because institutionalized design frameworks are absent (Abenes et al., 2023).

The absence of instructional innovation is not solely due to the teacher's struggles and commitment. It is often hindered when school management does not provide the necessary ICT infrastructure or technical support for these adaptations (Gonzaga et al., 2024). On the other hand, instructional adaptation is also an art, requiring significant reflection on teaching and learning, a high level of pedagogy, and a deep understanding of instructional design principles (Fajardo et al., 2025).

Teacher Competence and Practices in Inclusive Classrooms

Teacher competence is essential for inclusive education to be successfully implemented. In regard to teacher inclusive practice internationally, recent studies highlight the connection between practice and the degree of professional preparation, training, and teaching experience (Fajardo et al., 2025; Masongsong et al., 2023). A teacher's self-perceived competence and efficacy are primary determinants of their success in implementing inclusive programs; however, many mainstream teachers still report a lack of technical ability to provide instructional adaptations for diverse learners (Olayvar, 2022).

This deficit is often linked to educational leadership, as school heads must operationalize inclusive laws by providing the necessary resources and mentorship for effective classroom practice (Mbua, 2023). Critically, while many teachers express a desire for inclusion training, their "self-perceived competence" remains low, particularly regarding the technical aspects of instructional adaptation for diverse learners (Olayvar, 2022). This suggests that professional development must be systemic and management-led, rather than incidental, to foster a sense of efficacy that translates into classroom-level innovation (Masongsong et al., 2023).

Furthermore, teachers are reported to experience challenges to instructional adaptations due to the need for instructional balancing of varying degrees of complexity (Beltran et al., 2025). This requires teachers to develop a greater level of understanding of instructional adaptations and the curriculum design implications of inclusive frameworks.

Problems in Adapting Instructional Materials for LSEs

Despite policy support for inclusive education, teachers still face obstacles in adapting instructional materials and activities. Recent studies in the Philippines have highlighted shortages of teaching materials, a lack of Special Education (SPED) training, and ineffective enforcement of inclusive education policies (Gonzaga et al., 2024). A critical reality in Philippine classrooms is that while there are millions of children with disabilities, only a small fraction receive specialized services, placing the burden of curriculum implementation on general education teachers who may lack specific resources (Masongsong et al., 2023). While legislative frameworks like RA 11650 and DepEd Order No. 44, s.2021 provide structural mandates for inclusion, concrete educational realities reveal significant implementation gaps in overcrowded mainstream classrooms

These challenges prevent teachers from modifying educational materials to fit the needs of learners with special educational needs. The transition to the MATATAG Curriculum has further exposed these hurdles, as vague guidelines and a lack of specific training on adapting standard materials force many teachers to default to traditional, non-adaptive methods (Torrefiel et al., 2025). Although teachers tend to have positive attitudes toward inclusion, research indicates that this is not always paralleled by positive self-efficacy in curriculum implementation, particularly when resources are scarce (Calumpang, 2025). There is a gap in the research literature on the variability in teachers' adaptive instructional strategies regarding their professional qualifications. In other words, teacher adaptability in instructional strategies is also influenced by their education, training, and work experience (Olayvar, 2022). More research is needed on the problem of inclusivity and adaptive practices to bridge that gap and address insular instructional adaptation and systemic inclusivity.

The Impact of Teacher Profile on Instructional Practices

Recent studies have highlighted teacher-related variables (age, sex, level of education, teaching experience) relevant to changes in instructional practices (Olayvar, 2022). Research has shown that these variables influence the degree to which teachers exhibit flexibility and inclusiveness, as well as the challenges they face (Fajardo et al., 2025). Specifically, higher educational attainment and specialized training are significant predictors of a teacher's readiness to adopt evidence-based instructional innovations (Masongsong et al., 2023).

In addition, studies on the integration of special education into general education have indicated that differences in teaching duration and professional background account for variations in the degree to which teachers provide accommodations and the extent to which they use instructional materials (Fajardo et al., 2025). Despite these findings, some studies note that assessments of teaching practices do not always show significant differences across age or sex, suggesting that institutional leadership and resource availability may be more powerful drivers of inclusive practice than individual demographics alone (Coutts et al., 2025).

Synthesis and Research Gap

The literature highlights that inclusive education entails that teachers modify all teaching materials and activities to accommodate the varying needs of LSEs. However, most research focuses on generic inclusive attitudes or broad obstacles rather than the specific mechanics of instructional innovation beyond mere adaptation.



The Philippines has very little localized research and literature on teachers' instructional adaptive practices compared to teacher profile dimensions, such as age, sex, education, years of experience, etc. Furthermore, there is a lack of analytical evidence to distinguish between beliefs and actual curriculum implementation during major reform periods, such as the MATATAG transition (Torrefiel et al., 2025). This research addresses this gap by focusing on teachers' instructional adaptive practices in relation to their profile dimensions. By explicitly linking teacher attributes to the practical modification of materials, this study provides a unique contribution to policy development and the refinement of curriculum frameworks for inclusive education.

Theoretical Framework

This study is anchored in the Constructivist paradigm, which posits that the learner is an active agent who, with the resources of the environment and society, can build knowledge by balancing new information with what is already known (Schmidt, 2016). To advance an inclusive definition of teaching practice, this research will draw on Piagetian and Vygotskian theories to determine the extent to which teachers adapt the content and/or tasks they provide to learners as they progress along the Special Educational Needs (SEN) continuum.

Jean Piaget emphasized that learning is a continuous process of assimilation and accommodation (Schmidt, 2016). Practicing Instructional adaptation is, in itself, a teacher's means of stimulating these processes. For a particular learner, instructional resources that are adapted to be in closer proximity to the learner's schema (cognitive structures) stimulate the learner to effectively assimilate new content (Nichols, 2000). In an inclusive learning environment, if the gulf, or disparity, between the learner's prior knowledge and the learning progressions of the curriculum is too wide, there is an observable and palpable state of learning (Nichols, 2000). Therefore, a teacher should undertake the process of modifying the content and/or tasks to provide accommodation that will enable the learner to reorganize their learning and to attain a learning goal that is of a higher order or of a more advanced nature or of a more complex nature (Kaplan, 2018; Schmidt, 2016).

In addition, Lev Vygotsky contributed to the concept of the Zone of Proximal Development, which is understood as the gap between what a learner can do independently and what they can do with assistance and support (Hockham & Wallis, 2023; Salvat & Costa, 2016). The Vygotskian approach essentially justifies the practice of scaffolding, an innovative strategy that involves teachers giving temporary and flexible support, like making instructions simpler or providing interactive aids, to assist learners with special education needs (LSEs) to complete activities that they would not be able to complete independently (Mapunda et al., 2017; Park, 2024). In an inclusive teaching-learning situation, the teacher is expected to offer the "mediating artefacts" (resources) that facilitate the social co-construction of knowledge (Hockham & Wallis, 2023). Thus, differentiated instruction is understood as the operationalization of Vygotsky's theory, as it demands variation in the "process and products" of a lesson so that all learners are taught within their individual ZPDs (Auhl & Bain, 2021; Onyishi & Sefotho, 2020).

Moreover, when incorporated into Vygotsky's socio-cultural perspective on learning, disability is not associated with an insurmountable quantitative difference; instead, it is a "social situation of development", where an environment will be adapted to the greatest possible extent to narrow the difference between the child and the dominant curriculum (Sherpa & Baraily, 2021). This study conceptualized instructional modifications through the lens of constructivism and sought to determine whether teachers perceive their practices as the "scaffold" for LSEs' eventual development (Mapunda et al., 2017; Park, 2024). This conceptualization holds that for inclusive education to be effective, teachers must be able to develop and manage a dynamic learning environment that appreciates the various constructive processes of all the learners (Broderick et al., 2005; Schmidt, 2016).

Conceptual Framework

The conceptual framework of this study rests on the belief that inclusive instruction is multifaceted and intertwined, and that resource preparation is integral to its practice. Building on this belief, it is shown that the preparation and practice of inclusive instruction are a function of the teacher's personality and experience (Fajardo et al., 2025; Olayvar, 2022).

This study assumes that teachers' modification of instructional resources to some extent determines their practices in tailoring instructional activities for learners with special educational needs (LSEs). This initiative is designed to refine teaching practices, ensuring that instructional modifications more accurately align with each learner's strengths and challenges.

The study also acknowledges that the teachers' profile characteristics may play a role in the correlation among the variables mentioned. Age, sex, level of education, teaching experience, types of training attended, and specialization may determine the extent to which teachers can modify the elements of instructional materials and

instructional methods. These profile variables are therefore considered moderating variables that may either amplify or diminish the correlation between the independent and dependent variables.

Consequently, the study posits that the evaluation of teachers' adjustments in instructional materials for students with special educational needs is the independent variable. The evaluation of teachers' adjustments in instructional activities for students with special educational needs is, therefore, the dependent variable. The teachers' profile variables are posited as moderating factors that can affect the correlation between the two main variables.

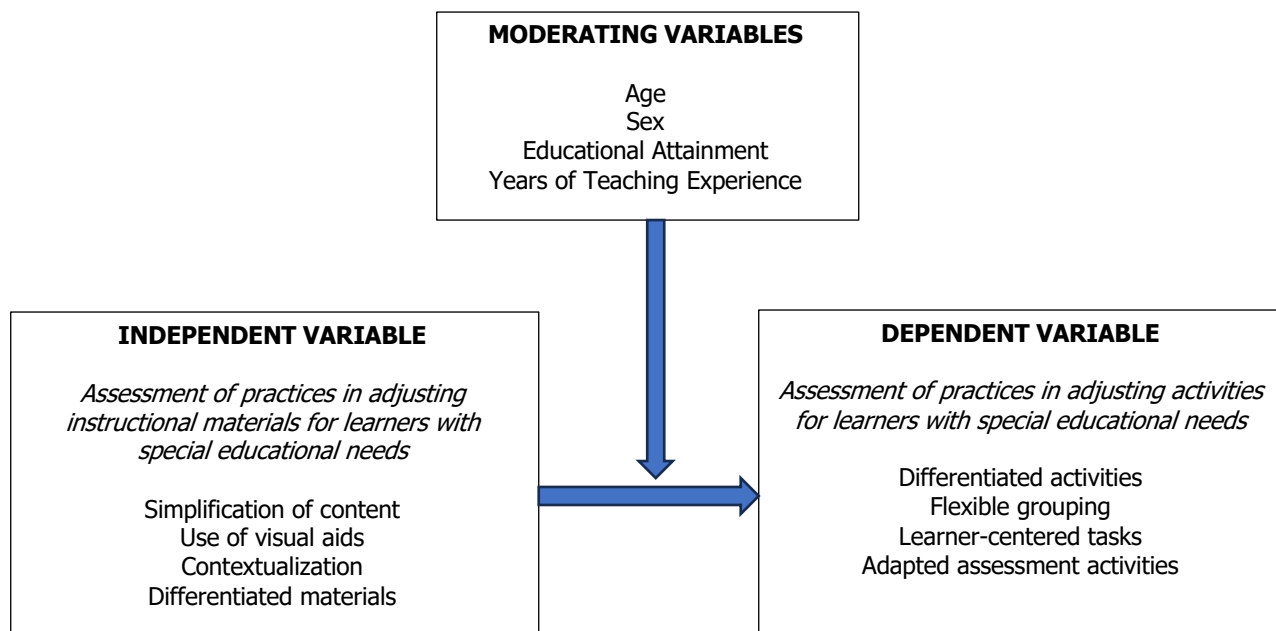


Figure 1. Research Paradigm

Statement of the Problem

This study was conducted to examine the practices of teachers in adjusting instructional materials and activities for learners with special educational needs (LSEs) within inclusive classroom settings. Despite the increasing emphasis on inclusive education, many teachers encounter challenges in effectively adapting instructional materials and designing appropriate learning activities that address diverse learner needs. Variations in teachers' profiles, such as age, sex, educational attainment, and teaching experience, may influence their ability to implement adaptive instructional practices.

Furthermore, while previous studies have explored teachers' attitudes and challenges in inclusive education, limited research has focused on the relationship between instructional material adaptation and activity modification, as well as how these practices differ across teacher characteristics. Addressing this gap is essential for improving instructional effectiveness and supporting inclusive teaching practices.

Thus, this study aims to analyze teachers' practices in adjusting instructional materials and activities, determine the relationship between these practices, and examine differences based on selected profile variables.

General Objective

To examine the practices of teachers in adjusting instructional materials and activities for learners with special educational needs (LSEs) and analyze their relationship and differences based on selected profile variables.

Specific Objectives

The study aims to:

1. Describe the profile of the teacher-respondents in terms of age, sex, educational attainment, and length of service as SPED teachers.

2. Assess the practices of teachers in adjusting instructional materials and activities for learners with special educational needs (LSEs).
3. Determine whether a significant relationship exists between teachers' practices in adjusting instructional materials and instructional activities.
4. Examine whether significant differences exist in teachers' practices when grouped according to their profile variables.

Research Questions

1. What is the profile of the teacher-respondents in terms of:
 - a. Age;
 - b. Sex;
 - c. Educational attainment; and
 - d. Length of service as a SPED teacher?
2. How do teachers assess their practices in adjusting instructional materials and activities for learners with special educational needs (LSEs)?
3. Is there a significant relationship between teachers' practices in adjusting instructional materials and instructional activities?
4. Are there significant differences in teachers' practices when grouped according to their profile variables?

Hypotheses

H₀₁: There is no significant relationship between teachers' practices in adjusting instructional materials and instructional activities for learners with special educational needs (LSEs).

H₀₂: There are no significant differences in teachers' practices in adjusting instructional materials and activities when grouped according to their profile variables.

METHODOLOGY

Research Design

A quantitative, descriptive-correlational research design was chosen for this study to systematically analyze teachers' practices for modifying instructional materials and activities for Learners with Special Educational Needs. The choice of the design is justified because it allows for the objective and accurate measurement of educational phenomena without manipulating variables and provides a solid basis for assessing the prevailing classroom situation (Fajardo et al., 2025; Olayvar, 2022).

The design's descriptive component functioned to gauge teachers' self-perceived practices in modifying materials/activities. This technique is helpful to explore the "what is" of a situation. For instance, the current nature of differentiated instruction and scaffolding practices in inclusive settings (Beltran et al., 2025). The researchers quantitatively analyzed the item responses to provide a statistically reliable indication of teachers' self-described readiness and competence (Masongsong et al., 2023).

At the same time, the correlational component was used to interpret the relationships among the study's variables. It referred to the determination of the relationship between the instructional material adjustment (independent variable) and instructional activity adjustment (dependent variable). Moreover, the design enabled a comparative study to identify significant differences in instructional practices based on profile variables, including years of teaching, level of education, and advanced training (Masongsong et al., 2023; Olayvar, 2022).

The use of this non-experimental design is considered appropriate within these contexts. The rationale is that it allows the discovery of patterns, relationships, and differences among variables in an educational situation beyond the researcher's control (Calumpang, 2025; Gonzaga et al., 2024). Rather than making claims about the "accuracy" of the design, the researcher rationalizes this choice by citing evidence to determine whether the variables attributed to the teachers significantly affect the outcome of inclusive instructional design (Fajardo et al., 2025; Olayvar, 2022). This way, the researchers can ensure that the results will be effective in evidence-led instructional design and provide a basis for stronger recommendations to support teachers (Gonzaga et al., 2024).

Population and Sampling

The participant pool for this study consisted of 40 Special Education teachers currently stationed within the Schools Division of Cavite, Philippines. This administrative region is a significant educational hub in the Calabarzon area, characterized by its implementation of national inclusive policies such as Republic Act No. 11650. By focusing on



this specific geographical context, the study provides a formal assessment of how localized school management translates national mandates into classroom-level instructional practices (Gonzaga et al., 2024).

The respondents were selected using a purposive sampling technique, a non-probability method utilized when the study requires participants with specific characteristics and "in-depth information" related to the research problem (Demirok et al., 2019; Mursi & Sulaimani, 2022). The rationale for this approach is to ensure that the data is derived from key informants who are directly responsible for the 'instructional design' and daily modification of curriculum materials for Learners with Special Educational Needs (Gyasi et al., 2020; Koc, 2024). Because the study aims to evaluate complex pedagogical adjustments, purposive sampling allows the researcher to select educators whose specialized expertise is most relevant to the phenomena under investigation (Gyasi et al., 2020).

To maintain data integrity, the following inclusion criteria were established: participants must currently teach LSEs in a public school setting and possess at least 1 year of teaching experience in a SPED or inclusive classroom. This experience threshold was mandated to ensure that the respondents had progressed beyond the initial "trainee" or transitional phases of their careers (Mursi & Sulaimani, 2022). Requiring a minimum of 1 year of tenure ensures that the findings reflect a stable "reality in practice," in which teachers have had sufficient time to encounter and address the practical 'instructional balancing' challenges inherent in inclusive pedagogy (Fajardo et al., 2025; Beltran et al., 2025). This way, it is ensured that the participant sample provides a seasoned perspective on the relationship between teacher profiles and the successful adaptation of instructional materials and activities (Masongsong et al., 2023; Olayvar, 2022).

Research Instrument

The primary tool for data collection was a researcher-made questionnaire. This instrument was designed to capture the specific mechanics of instructional innovation and curriculum implementation within inclusive settings (Abenes et al., 2023; Torrefiel et al., 2025). The questionnaire is divided into two distinct parts:

The first part dealt with the demographic profile of the Teacher-Respondents. This section gathered data on the moderating variables identified in the conceptual framework: age, sex, highest educational attainment, and length of service as a SPED teacher. Capturing these profile dimensions is essential for determining how a teacher's professional background influences self-efficacy and readiness to modify instructional design (Calumpang, 2025; Masongsong et al., 2023).

The second part of the questionnaire was for the Assessment of Instructional Practices. This component consisted of 20 items evaluating the frequency of adaptive practices (11 for adjusting instructional materials and 9 for adjusting instructional activities), measured on a 4-point Likert scale.

To ensure content validity, the instrument underwent rigorous evaluation by a panel of experts, including SPED specialists, seasoned educators, and research professionals. The panel assessed each item for clarity, relevance, and alignment with the principles of Universal Design for Learning, leading to the refinement of items to better reflect the realities of the Philippine inclusive classroom (Gonzaga et al., 2024).

For reliability, the instrument underwent pilot testing with a group of SPED teachers not included in the final sample. The internal consistency of the questionnaire was verified using Cronbach's alpha, yielding a high reliability coefficient that confirms the instrument's stability for assessing teacher-led instructional innovation (Masongsong et al., 2023; Olayvar, 2022). This reliability coefficient ensures that the tool is a statistically sound measure for analyzing the relationship between material preparation and activity implementation.

The instrument utilized a 4-point Likert scale to quantify the frequency and consistency of the teachers' instructional adaptive practices. The choice of a 4-point scale (a "forced-choice" model) is methodologically significant as it eliminates a neutral midpoint, thereby preventing central tendency bias and requiring respondents to provide a definitive self-assessment of their practices (Calumpang, 2025; Olayvar, 2022).

The responses were interpreted using the following statistical range and verbal descriptions:

Table 1

Mean Range and Verbal Descriptions for the Assessment of Instructional Practices

Mean Range	Scale Value	Verbal Interpretation	Operational Definition in Practice
3.26 – 4.00	4	Always True of Me	The practice is consistently and habitually integrated into the teacher's instructional design.
2.51 – 3.25	3	Often True of Me	The practice is frequently used but may vary depending on resource availability.



1.76 – 2.50	2	Sometimes True of Me	The practice is used occasionally or only during specific instructional scenarios.
1.00 – 1.75	1	Never True of Me	The practice is absent from the teacher's current pedagogical repertoire for LSEs.

Data Collection Procedure

Data collection was conducted over four weeks following administrative clearance from the Schools Division Office of Cavite and respective school heads. After securing informed consent to ensure voluntary participation and data confidentiality, the researcher distributed the instrument to 40 SPED teachers using a multi-modal approach—offering both electronic and printed formats to maximize response rates and participant convenience (Demirok et al., 2019; Gonzaga et al., 2024). Respondents were given a two-week window to complete, allowing them to reflect on their specific instructional adaptation practices. Finally, questionnaires were retrieved via digital submission or direct collection, audited for completeness, and encoded for statistical analysis of the relationship between teacher profiles and instructional innovation (Gyasi et al., 2020; Olayvar, 2022).

Treatment of Data

Data was analyzed at a 0.05 level of significance to ensure the validity of findings regarding teacher training and self-efficacy (Masongsong et al., 2023; Olayvar, 2022). The following statistical tools were employed:

- Frequency and Percentage Distribution: Used to summarize the demographic profile (age, sex, education, and experience), establishing a baseline for the participant pool within the context of the Schools Division of Cavite (Gonzaga et al., 2024).
- Weighted Mean: Utilized to evaluate the level of practices in adjusting instructional materials and activities, interpreted through the 4-point Likert scale to identify meaningful instructional innovation (Torrefiel et al., 2025).
- Pearson Product-Moment Correlation: Applied to assess the strength and direction of the relationship between material and activity adjustments, testing if pedagogical execution depends on resource modification (Calumpang, 2025; Park, 2024).
- Independent Samples t-test and One-Way ANOVA: These inferential tools identified significant differences in practices based on profile variables—comparing two groups (t-test) or three or more categories (Masongsong et al., 2023; Olayvar, 2022).

These analyses determined whether specific teacher attributes, such as specialized training or advanced degrees, significantly moderate a teacher's self-efficacy and capacity for instructional adaptation (Calumpang, 2025; Masongsong et al., 2023; Olayvar, 2022).

Ethical Considerations

In accordance with ethical norms, this study received institutional approval, a standard requirement for research within the Schools Division. Participation was voluntary, and respondents provided informed consent and were notified of their right to withdraw without consequence, consistent with established protocols for assessing teacher-respondents (Calumpang, 2025; Olayvar, 2022). To ensure anonymity, identities were coded, and all data were kept strictly confidential. Finally, data are stored in encrypted folders or locked cabinets for three years to maintain participant privacy and comply with research security standards (Gonzaga et al., 2024).

RESULTS and DISCUSSION

This section presents the study's results and provides a comprehensive discussion of the research questions. The findings are interpreted in light of established learning theories and related empirical literature to clarify the observed results.

Table 2
Profile of the Teacher-Respondents

Profile Variable	Category	Frequency (f)	Percentage (%)
Age	25–29	12	30
	30–34	7	18
	35–39	8	20
	40–44	7	18
	45–49	6	15
	Total		40
Sex	Male	13	33
	Female	27	68
	Total	40	100
Educational Attainment	Bachelor's Degree	15	38
	With MA/MS Units	12	30
	With MA/MS Degree	8	20
	With PhD/EdD Units	5	13
	With PhD/EdD Degree	0	0
	Total	40	100
Length of Service (Years)	5–9	11	28
	10–14	10	25
	15–19	10	25
	20–24	4	10
	25–29	3	8
	30 and above	2	5
	Total	40	100

The analysis of the teacher-respondents' profiles shown in Table 2 reveals a predominantly youthful workforce, with 30% of participants falling within the 25–29 age bracket. While this demographic trend suggests a generation of "digital natives" who may be more receptive to technological integration and instructional innovation, the 68% female majority reflects a traditional gender distribution consistent with the broader Philippine special education sector.

Furthermore, professional qualifications indicate a state of "continuous engagement" rather than "advanced specialization," as 30% of respondents have earned graduate units, but 0% have completed a doctoral degree. This profile suggests that while teachers are academically active, there is a gap in high-level expertise required for complex curricular re-engineering.

For teacher education institutions and school leaders, this underscores the need to move beyond general inclusion theory toward structured mentorship programs that bridge the gap between generalist training and the specialized technical skills needed for learners with special educational needs (Gyasi et al., 2020; Masongsong et al., 2023; Olayvar, 2022).

Table 3
Assessment of Teachers' Practices

Domain	Mean	SD	Interpretation
Adjustment of Instructional Materials	3.56	0.49	Always True of Me
Adjustment of Instructional Activities	3.49	0.51	Always True of Me
Overall Mean	3.53	0.50	Always True of Me

As shown in Table 3, the assessment of instructional practices indicates an overall mean of 3.53, interpreted as "Always True of Me," which reflects a high level of self-perceived competence. However, a critical "Comfort Gap" is evident: teachers exhibit a slightly higher mean for adjusting instructional materials (3.56) than for adjusting instructional activities (3.49). This disparity suggests that teachers find tangible resource modifications—such as

enlarging fonts or using visual aids—less challenging than the deeper cognitive adjustments required for differentiated activities, which demand greater planning and classroom organization.

This "situational reality" implies that teachers may be well-equipped with the "tools" of learning but face significant activity and time constraints when attempting to implement integrated instructional innovations (Beltran et al., 2025). For curriculum developers, this highlights the need for the MATATAG curriculum transition to provide more explicit, predifferentiated templates that reduce teachers' individual planning burden (Fuentes, 2025).

Table 4
Relationship Between Practices

Variables	N	Pearson r	p-value	Degree of Relationship	Interpretation	Decision
Adjustment of Instructional Materials and Adjustment of Instructional Activities	40	0.12	0.462	Very Weak Positive Correlation	Not Significant	Accept Ho

According to Table 4, the correlation analysis yielded a very weak positive Pearson r of 0.12 ($p = 0.462$), indicating that the relationship between material and activity adjustment is not statistically significant. This finding is academically significant because it challenges the assumption that being skilled in one area of teaching automatically translates into proficiency in another (Abantas-Emji et al., 2025); instead, it suggests a "fragmentation of inclusive pedagogy" in which these two core domains are practiced in isolation.

When anchored in established learning theories, the instructional material serves as the "prop," while the activity represents the vital "interaction" within the learning environment (Park, 2024). This statistical disconnect means that school leaders and policymakers must prioritize training that integrates both elements, ensuring that resource modifications directly support cognitive engagement rather than remaining a separate administrative task.

Table 5
Differences in Teachers' Practices When Grouped According to Profile Variables

Profile Variable	df	Materials				Activities			
		Test Statistic	p-value	Decision	Interpretation	Test Statistic	p-value	Decision	Interpretation
Age	4	1.26	0.867	Accept Ho	Not Significant	9.18	0.057	Accept Ho	Not Significant
Sex	1	6.97	0.008	Reject Ho	Significant	1.16	0.281	Accept Ho	Not Significant
Educational Attainment	3	15.98	0.001	Reject Ho	Significant	6.49	0.090	Accept Ho	Not Significant
Length of Service	5	17.20	0.004	Reject Ho	Significant	8.31	0.140	Accept Ho	Not Significant

Table 5 demonstrates that significant differences exist in the practice of modifying instructional materials by Sex ($p = 0.008$), Educational Attainment ($p = 0.001$), and Length of Service ($p = 0.004$), whereas no such differences were found for instructional activities.

Data suggests that while advanced degrees and experience do enhance a teacher's ability to adapt tangible resources, they have little impact on the variability of classroom activities (Olayvar, 2022). This "uniformity of practice" in activities can be explained by rigid curricular demands and overcrowded mainstream classrooms that impose similar teaching situations on all SPED teachers regardless of their individual attributes (Algrairay, 2023).

Consequently, policy mandates like Republic Act No. 11650 must move beyond merely providing assistive technologies to fostering a school climate that grants all teachers the creative autonomy needed to innovate pedagogical execution (Gonzaga et al., 2024). For school leaders, the focus should shift from hiring based on profiles to providing systemic support that allows all educators to overcome institutional constraints and achieve meaningful instructional innovation (Mbua, 2023).

Conclusions

Based on the findings, the study concludes that teachers demonstrate strong engagement in adjusting instructional materials and activities for learners with special educational needs (LSEs), reflecting their commitment to inclusive teaching practices. However, the lack of a significant relationship between instructional material and activity adjustments indicates a gap in the integration of instructional planning.

The findings further reveal that teacher-related factors such as sex, educational attainment, and years of service influence the adaptation of instructional materials, highlighting the role of professional experience and training in shaping inclusive practices. In contrast, instructional activity adaptation appears to be more uniform, suggesting the influence of standardized teaching approaches or curricular constraints.

These results contribute to educational practice by emphasizing the need for integrated instructional design, strengthening teacher capacity in inclusive pedagogy, and informing curriculum development that supports both material and activity adaptation. The study also provides insights for educational leadership in designing targeted professional development programs for teachers.

Recommendations

In light of the findings and conclusions, the following recommendations are proposed:

1. Teachers may enhance their professional competencies through continuous training focused on integrating instructional material modification and activity design for learners with special educational needs (SENs).
2. School leaders may implement structured professional development programs, including mentoring and collaborative lesson planning, to support teachers in developing inclusive instructional practices.
3. Curriculum developers may incorporate flexible and adaptive instructional frameworks that guide teachers in designing inclusive learning activities aligned with modified instructional materials.
4. Education policymakers may strengthen support for inclusive education by providing resources, assistive technologies, and sustained training programs that address both instructional materials and activity adaptation.
5. Teacher education institutions may integrate practical and experiential components in pre-service and in-service programs to develop competencies in inclusive instructional design.
6. Future researchers may explore additional variables such as school context, availability of resources, and institutional support systems to further understand factors influencing instructional adaptation practices.

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