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| RESEARCH ARTICLE

Measuring the Success of General Education Teacher Strategies in Inclusive Learning Settings

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| ABSTRACT

This study examines the effectiveness of practical techniques and interventions employed by general education teachers in inclusive education at Bonbon Elementary School, Cebu, during the academic year 2024-2025. Anchored in Social Cognitive Theory (SCT) and the Universal Design for Learning (UDL) framework, it emphasizes the role of teachers' self-efficacy and adaptability in fostering inclusive learning environments. A descriptive research design was utilized, involving 30 regular teachers instructing students with and without special needs. Data were collected using a pre-existing questionnaire to evaluate interventions such as differentiated instruction, cooperative learning, and curriculum adaptation. Findings show that teachers excel in applying differentiated instruction and cooperative learning strategies but face challenges in modifying assessments for students with special needs. Collaboration with SpEd professionals was pointed out as an area need improvement, while no significant correlation emerged between demographic factors and teacher performance in implementing inclusive strategies. The study emphasizes the need for targeted professional development, mentorship systems, and enhanced collaboration between general and special education teachers to optimize inclusive education practices and improve student outcomes.

1. Introduction

Inclusive education is a cornerstone of ensuring equitable and quality education. SDG #4, "Today with Quality Education," represents a United Nations goal that supports inclusive and fair education. Concerning students' abilities, backgrounds, or situations, all students should have lifelong learning opportunities. Inclusive education is not simply including someone who has a disability; it is about making changes in teaching methods and the environment so that individual needs are met. By creating this nurturing environment, students can be at ease with their studies along with peers around them.

In the Philippine context highlighted by the UN Philippines Inclusive Education Report, issues facing inclusive education include a lack of resources, insufficient teacher training, and barriers to curriculum modification and assessment design. The report argues for transforming the current education system so that it becomes more accessible and inclusive, especially for disadvantaged children, including disabled people, Indigenous groups, or those from poor socio-economic backgrounds.

Bonbon Elementary School grapples with similar dilemmas on the local level in fostering inclusive classrooms. Teachers responsible for general education at this school must cater to a mixed clientele of students with and without special needs. However, they face significant handicaps such as scarce opportunities for professional development on inclusive teaching strategies with inadequate cooperation between experienced educators in SpEd and the classroom teachers trying their best to

struggle to update assessments to reflect differing abilities. It leads to gaps in educational outcomes for all students, emphasizing the pressing need for selected research and intervention strategies.

Existing research has given us valuable insights into effective strategies in inclusive education, whether domain-wide or at specific locations. Recent trends include a homebred variety of valid modifications tailored to different groups of learners. Studies by Florian and Linklater (2019) emphasize the importance of differentiated teaching, group work activities stimulated by smaller teams who know each other well, and an additional measure in helping disadvantaged learners further removed from urban settings to match up with more typical ones.

However, Miles (2017) highlights significant gaps in our understanding of the long-term impact these practices can have – especially when they are transplanted from one kind of context into another like that found here. Nor know much at all about forces such as Universal Design for Learning (UDL), co-teaching, where teachers feel responsibility for more than just one group in each grade level at once, and Positive Behavioral Interventions and Supports (PBIS) work on setting norms that help all kids from diverse backgrounds feel comfortable in school.

This study aims to address these dilemmas by assessing the effectiveness of practical techniques such as differentiated instruction, UDL, and co-teaching within Bonbon Elementary School. By identifying advantages and disadvantages in existing practice, it aims to identify issues needing to be addressed within inclusive education. The findings add to the global discussion on inclusive education and help guide local policy decisions and teacher training programs, aligning these with UN SD #4. Furthermore, the study hopes to inform attempts at dismantling systemic barriers and ultimately create a more inclusive, equitable context from which all learners may learn.

1.1 Theoretical Background

This study is anchored on the Social Cognitive Theory (SCT) and the Universal Design for Learning (UDL) framework that would enhance inclusive education practices within the K to 12 Basic Education Program. Social Cognitive Theory (SCT) emphasized the importance of observational learning and self-efficacy, which could help educators confidently apply inclusive strategies. At the same time, Universal Design for Learning (UDL) principles, such as providing multiple means of representation, engagement, and expression, supported the creation of flexible learning environments that accommodated diverse learner needs.

The legal frameworks, such as Philippine Republic Act R.A. 5250, R.A. 11650, R.A. 10533, and Department of Education Order D.O. 44 S. 2021, upheld the theoretical foundations by advocating for the integration and assistance of students with disabilities, incorporating inclusive education into the core values of the education system. Therefore, it was expected that by adhering to these theories and policies, educational achievements would improve, and a more inclusive learning environment would be created for all students.

Social Cognitive Theory (SCT) established by the psychologist Albert Bandura, provided a strong theoretical framework for studying how general education teachers were successful in inclusive learning environments. SCT explains human behavior as a continuously shifting interaction of personal, behavioral, and environmental influences, and that individuals are active learners and designers of their own behavior through experiences involving their environment instead of passive components that only respond to their environment (Islam et al., 2023). Self-regulation, observational learning, and reciprocal determinism were key components of this theory. Self-regulation is a complex process containing three stages self-observation, self-evaluation, and self-reaction which help an individual to control and lead their thoughts, emotions, and actions. Another significant factor was observational learning, or vicarious learning when people learned new behaviors from watching others and cases of their behaviors. Such learning was key for social interactions and complex skill acquisition.

As such, within inclusive education SCT enabled us to gain meaningful insights into the successfulness of the general education teacher implements. Self-efficacy was one of the core concepts of SCT and referred to the development of beliefs regarding an individual's own ability to succeed in performing a behavior. Strong self-efficacy levels in relation to management of students with diverse needs within an inclusive classroom context, significantly impacts the effectiveness of targeted interventions by the teacher (Peter et.al, 2024). Teachers with high self-efficacy were 27% more likely to be persistent in their efforts to help students with disabilities or special needs succeed, willing to try new teaching methods, and providing assistance that engaged and stimulated student learning. Moreover, SCT also highlighted the importance of observational learning which enabled teachers to learn new skills and strategies by watching fellow teachers engage in effective practices. In inclusive environments where teachers adjusted their teaching practices to accommodate diverse learners, this feature was especially helpful.

A third principle of SCT, reciprocal determinism, cited those teachers, students, and the classroom environment mutually influence one another. Teachers deepened their interventions by seeking regular feedback from students and their families,

working with specially trained educators, and iteratively adjusting their approach. This two-way interaction underlined how salient these adjustments came to be throughout the course of the teaching and their evolution in relation to how students fared with the lessons and how the classroom atmosphere changed.

This aims to enhance their practice towards interventions for students with learning difficulties or those at risk in inclusive education settings, focusing on better learning outcomes, enhancing students' academic engagement and creating an enabling educational environment through the application of principles of Social Cognitive Theory (SCT). The Social Cognitive Theory (SCT)provided educators with a deep understanding of the relationship between personal beliefs and behaviors, and environmental factors (principally self-efficacy, observational learning, and reciprocal determinism); thus allowing educators to implement more inclusive practices to meet students' diverse needs and to develop a fair learning environment that promoted academic achievement.

The constructs of Social Cognitive Theory were applied in inclusive education, enabling students to receive a deeper level of learning. Collaboration, resilience, and a sense of belonging were key enablers for their academic and social development.

A second relevant framework for evaluating the effectiveness of general education teacher approaches to support student learning in inclusive settings was UDL (universal learning design), a theory proposed by the Center for Applied Special Technology (CAST) in the early 2000s. The UDL framework was a comprehensive approach to developing and enacting inclusive instructional practices that met the needs of diverse learners and made flexible learning experiences accessible and aligned (CAST, 2018). The theory was based upon three basic principles: The first was multiple means of representation, or giving learners different ways to access and understand content; The second was multiple means of action and expression, or allowing us to demonstrate our knowledge and skills in different ways; And third was multiple means of engagement, focusing on the learning environment we create to help motivate students and maintain their interest and effort (CAST, 2018).

Universal Learning Design underscored the importance of proactive design in developing inclusive learning experiences, contrasting with the traditional approach of reactive accommodations. This proactive stance aligned with the need for effective inclusive practices to be embedded into the overall instructional framework rather than being an afterthought. By employing UDL principles, educators anticipated and addressed a broad range of learner needs from the outset, enhancing their teaching strategies' inclusivity.

About analyzing general education teacher interventions, UDL provided a valuable lens through which to assess how well teachers integrated these principles into their practice. Researchers explored how teachers' understanding and application of UDL principles impacted the effectiveness of their interventions and the subsequent learning outcomes for students. For instance, examining how teachers implemented multiple means of representation revealed whether they successfully provided content in varied formats that catered to different learning styles and needs. Similarly, evaluating multiple means of action and expression shed light on whether teachers offered diverse ways for students to demonstrate their understanding, which was particularly beneficial for those with varying abilities. Furthermore, assessing how teachers fostered multiple means of engagement helped determine if they created motivating and supportive learning environments that sustained student interest and effort. By grounding the analysis of teacher interventions in UDL principles, researchers gained insights into the effectiveness of inclusive practices and identified areas for improvement. This approach highlighted how well general education teachers applied UDL principles and revealed the impact of these practices on student engagement, participation, and overall learning outcomes. Integrating UDL into the evaluation of inclusive education practices thus provided a comprehensive framework for understanding and enhancing the success of general education teacher interventions in diverse learning environments (Oyarzun et al., 2021).

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In 1968, Republic Act 5250, called the "Ten-Year Program for Teachers of Special and Exceptionally 4800 Children," laid a solid foundation for inclusive education in the Philippines. The law was noted as addressing a long-standing and desperate scarcity of teachers competent to assist students with disabilities through a 10-year program to improve the skills of general education teachers. This framework is relevant to present-day research about the effectiveness of general education teacher interventions in an inclusive classroom as it is situated within the social cognitive theory and combined elements of the Universal Design for Learning (UDL) (R.A. 5250).

The essence of R.A. 5250 lies in its mandate to equip regular teachers with specialized training to identify, assess, and modify instructional methods for students with diverse needs. This directly supported social cognitive theory, which emphasized the importance of teacher self-efficacy, which is the belief in one's ability to execute behaviors necessary to produce specific performance attainments that influence teaching practices and student outcomes. R.A. 5250 chooses a foundation for successful interventions catering to students' unique needs in inclusive settings by bolstering teachers' confidence and competence in delivering differentiated instruction.

In addition, R.A. 5250 seeks to provide teachers the ability to adapt instructional materials, and to apply evidence-based interventions that are naturally consistent with UDL theory. UDL is an acronym standing for universal design for learning, and they "argued that multiple means of representation, action and engagement should be available in inclusive classrooms to meet the learning preferences and abilities of diverse learners (p.533)." Hence, through a needs-based training, R.A. 5250 equipped teachers with functional principles of UDL equipping teachers with strategies to make education accessible to all students no matter their learning diversity. This was complemented by R.A. 116, which institutionalized such a commitment by requiring the inclusion of students with disabilities into general schools. This law focused on the need for hands-on training, actual resources, and inclusive curricula that went into different learning styles and abilities. R.A. 116 ensured that the preparation of general education teachers in inclusive education became a priority by effectively promoting the design of teaching strategies that conformed to UDL principles.

The conceptual groundwork for R.A. 5250 and R.A. 116 has founded the pathways for the effectiveness of general education teacher interventions for learners in inclusive learning environments. Notably, such laws also aimed to especially address why and how training was important and established positive steps to foster such inclusive norms. Studying this law through the lenses of Social Cognitive Theory and UDL emphasized the importance of teacher self-efficacy and adaptable instructional design as essential components in promoting student success.

These interventions specifically involved differentiated instruction, collaborative learning activities, and the use of assistive technologies, all strategies that were supported by Social Cognitive Theory and UDL in practice. When teachers were trained to feel confident in implementing these interventions, they created a classroom where everyone, even those with disabilities, could excel.

Finally, R.A. 5250 and R.A. 116 provided legal foundations that helped support general education teacher practices for effective placement. These laws also equipped teachers, giving them the required training, resources, and legislative support to translate theory into practice, enhancing the education experience for all students.

In this regard, searching the theoretical underpinnings of Social Cognitive Theory and Universal Design for Learning (UDL) in conjunction with the pathways to key legislation facilitated a deeper understanding of the need for a broad perspective on inclusion. The Social Cognitive Theory asserted that teacher beliefs, especially self-efficacy, influence classroom instructions and teachers' and students' outcomes. If teachers were confident in their ability to teach a diverse classroom, they were more likely to adopt inclusive teaching strategies. On the other hand, UDL provided a more practical framework for creating accessible teaching environments that promoted flexibility in the approaches to how to teach the material so that all students could succeed.

Combined, these frameworks showed that quality inclusive education did not just happen because diverse students were physically present in classrooms but was dependent on legal and proof of professional development and implemented evidence-based practices. In the Philippines, for instance, laws like R.A. 5250 and R.A. 116 provided the legal basis that turned inclusive education into a systematic movement, thereby supporting it.

1.2 Objectives of the Study

This study analyzed the success of general education teacher interventions in an inclusive learning environment at an elementary school in Bonbon, Cebu, Philippines, during the Academic Year 2024-2025. The findings served as the basis for enhanced practical techniques and interventions.

Specifically, it aimed to:

1. Describe the demographic profile of the teacher-respondents in terms of age and gender; highest educational attainment;
2. Determine the level of performance in the application of the teacher-respondents in terms of strategies and interventions.
3. Determine the significance of the relationship between the demographic profile and the level of performance of the teacher respondents.
4. Explore the challenges that the teacher respondents encountered when integrating practical techniques and interventions.
5. Propose enhanced practical techniques and interventions based on the findings of the study.

Statement of the Null Hypothesis

Based on the objectives of the study, the following null hypothesis was tested at a 0.05 level of significance:

Ho: There is no significant relationship between the demographic profile and the teacher respondents' performance level.

2. Methodology
2.1 Research Design

Using a descriptive correlational research design, grounded in Peirce's methodology as a noted American philosopher, logician, and scientist, the researcher. This non-experimental design based on systematic observation was implemented to describe the phenomena of study and explore relationships between without manipulating them, allowing to better understand patterns and trends in the observed context. According to Creswell (2014), descriptive correlational designs are useful for determining the relationship between and among variables and providing a nuanced, original understanding of these variables.

This approach is particularly appropriate for gaining insight into the practice, perception and difficulties in inclusive education in Bonbon Elementary School. Using regular observation and solid proof, the researcher protected guidelines for classification and exploratory techniques that are Peirce's ideas to the logic and practical point. This design enabled an impartial analysis of associations between various demographic factors of teachers and their effectiveness in utilizing inclusive strategies.

With the methodological rigor that was apparent in the research, the researcher situated a rich, truthful, detailed account of what is happening now, and through the lens of this methodological commitment produced meaningful knowledge regarding the very complex phenomena of inclusive education. The outcome paid homage to Peirce's theoretical contributions and Creswell's methodological expertise by giving a systematic, yet adaptable, tool for decoding and interpreting educational phenomena and their meaning.

2.2 Environment

The research was conducted in an elementary school in Bonbon, Cebu, Philippines, built in 1946 through the efforts of the late man who envisioned that the children of his community must be educated. He convinced the parents to enroll their children and prepare for any difficulties they might normally encounter due to the unfriendly weather, which made paths difficult for the children to navigate. Many times, children could not go home when trapped by floods on rainy days, and he sheltered them in his house. The vision became a mission when he asked his father to donate a lot for the school.

To recount this story was to reflect on the eventful floods that destroyed the makeshift classrooms, but the dream-come-true experience resembled the rainbow after the rain, particularly due to the positive response from the father. Thus, the establishment of what is now an elementary school came to fruition.

The Elementary School, with ID 119911, was situated 18 kilometers west of Cebu City in Barangay Bonbon, Cebu, Philippines. It had a land area of 9,043 square meters, of which 5,000 square meters was acquired through the donation of the late man.

Additionally, a lot of 1,322 square meters was donated by a retired teacher of BES, while the remaining 2,721 square meters was donated by the late daughter of the original donor.

The Elementary School is under South District II, Division of Cebu City, Region VII, Cebu, Philippines. The school was accessible by various modes of transportation, such as cars, public utility jeepneys, and motorcycles, commonly known as "Habal Habal." It was surrounded by both public and private elementary and secondary schools, as well as a college and university (CTU Mountain Extension), with a distance of 1 km between private elementary and secondary schools and the college and university. Minimal untoward incidents, as well as crimes caused by natural hazards, were recorded in the last three years. At that time, BES had a population of 1,400 enrollees being catered to in 34 classrooms. The school had 4 teachers for Kindergarten learners, 30 teachers for Grade 1-6 learners, and 1 special teacher.

2.3 Respondents

The study utilized a purposive sampling design, a non-probability study sampling method defined by its selection of individuals with direct experience and expertise relevant to the research objectives. This allowed a purposeful selection of individuals who had the potential to give desired information concerning the success of inclusive study practices. Purposive sampling is useful in educational research, especially when the goal is to obtain detailed and in-depth information from individuals closely associated with the phenomenon you are interested in researching.

The researcher selected 35 general education teachers who actively co-teach both special needs students and typical students in inclusion classrooms. Criteria for participating in the study included implementing practices that best meet the needs of students in inclusive classrooms for a minimum of one academic year, current classroom involvement with diverse student populations, and working in recognized inclusive education programs. Focusing on teachers actively working in implementing inclusion (e.g., differentiated instruction, co-teaching) helped ensure that the data gathered would be grounded in practice. The distribution of respondents is given in Table 1, with females comprising 94.29 % and males 5.71 %.

Table 1. Distribution of the Respondents (n = 184)

Gender	f	%
Male	2	5.71%
Female	33	94.29%
Total	35	100.00

For the Sampling Process, it started cooperating with school administrators at Bonbon Elementary School, identified as one of the schools for inclusive Programs. In consultation with administrators, the researcher identified potential participants who met the criteria. Formal invitations were then issued to these teachers along with written information that discussed the aims of the study, what was expected of the teachers, and ethical guidelines, including confidentiality and voluntary participation. The teachers who agreed to take part in the study made up a sample of educators with direct examples of inclusive teaching in practice.

This purposeful sampling method was precisely planned to harvest the rich and applicable insights provided by potential employees engaged in inclusive education. Concentrating the research efforts on teachers with experience of inclusive practices in mixed-ability classrooms will generate data that can form the basis for discussing strategies for promoting more inclusive practices and policies in the same contexts.

2.4 Instrument

The researcher used the adapted version of the survey questionnaire developed by Hall et al. They evaluate the effectiveness of strategies and interventions used by general education teachers working in inclusive education (George, 2020). A four-point Likert scale was used to analyze the respondents' perceptions of their inclusive practices, where four indicated Strongly Agree, and 1 indicated Strongly Disagree. Data could be quantified on the usage and perceived effectiveness of various inclusive practices, including differentiation, curriculum modification, and co-teaching.

The original instrument by Hall et al. (Gonzalez et al., 2020) showed excellent psychometric properties, with a validity index of 0.89 and a reliability coefficient (Cronbach's alpha) of 0.92, confirming its efficacy in measuring relevant constructs. These indices supported its use as the basis for adaptations in the present study. An adapted version faithfully aligned with the local context while remaining true to the original framework.

To buttress the richness of the findings, qualitative data were also extracted through semi-structured interviews from a select group of participants. This combination of methods gave the researcher a broad quantitative trend and detailed qualitative information about teachers' challenges, experiences, and desires in their inclusive classrooms.

Hall et al. were formally approached and granted permission to adapt the survey questionnaire from Albacete et al. (2020). The authors provided details about the study aims and planned modifications to the instrument and assured compliance with ethics. Evidence of this correspondence is included in the appendices.

The adapted survey questionnaire was instrumental in determining the effectiveness of inclusive teaching practices based on self-reports, informing the policy directions, and identifying professional development needs. Copies of the repurposed instrument and evidence of communication with Hall et al. (2020) are in the appendices.

2.5 Data Gathering

The data-gathering procedures involved three stages: the preliminary stage, the data-gathering stage, and the post-data stage.

Preliminary Stage. First, permission was obtained from the Dean of the Graduate Studies and the research adviser through a signed letter of authorization before data collection. The authorization was then forwarded to the school principal to obtain their consent to allow the researcher to gather data from their constituents.

After acquiring the written approval, the School Principals/Heads were officially notified through another transmittal letter. Then, once official approvals from authorities have been secured, it is now time to get in touch with the respondents. A written informed consent was acquired from participants ensuring them confidentiality, and their right to withdraw anytime. A protocol maintaining the confidentiality of information was established. Before data collection, the respondents were briefed, and any inquiry was answered and doubts were clarified pertaining to the study's goals and processes.

Data Gathering Stage. Upon receiving the required permissions, questionnaires were then distributed to respondents personally on scheduled dates. Accommodations were made for the needed guidance during administration. Completed questionnaires were promptly retrieved.

Post Data Gathering Stage. Finally, the gathered data were organized, tabulated, analyzed, and interpreted using appropriate statistical methods and tools.

2.6 Data Analysis

Descriptive statistics of frequency and percentage distribution were used to analyze the demographic profile of teacher-respondents. This would be a clear and tabulated presentation of the distribution of the sample according to age, gender, civil status, highest educational attainment, specialization, and the training that they attended. These data will provide context for the backgrounds of the respondents as well as potentially relevant factors that might shape their approaches to work in the classroom.

The researcher also computed the mean and standard deviation of the teachers' self-reported effectiveness in utilizing inclusive teaching strategies. The mean scores represent specific practices by the level of implementation, whereas the standard deviation will indicate the reliability of the teachers' responses. This analysis shows how well inclusive education strategies are being applied and the significant differences in their implementation.

Finally, the data analysis was used to answer the study-specific aims. Details on these findings included the demographic profile of the teachers, what they reported regarding their inclusive practices, and what they found in areas where they could improve. It allows for iterative and close examination of the data to reach the goals of the study and provide an action that could help advance inclusive education.

2.7 Ethical Considerations

In keeping with the ethical principles to guarantee the rights, confidentiality, and well-being of the respondents involved in this study. To conduct this qualitative case study, the researcher sought informed consent from all teachers who agreed to participate in the study in order to ensure that individuals understand the purpose of the study, and their involvement in the research. Participation was voluntary; teachers can withdraw at any time without consequence. Furthermore, free will affirmation forms will be distributed and signed to confirm that study participants are voluntarily participating.

The privacy and anonymity of participants were maintained during the research process. Responses collected from the teachers remained private, and their identifiers were removed from the responses to eliminate one source of identity. In addition, because this study involves human subjects (high school students), the researcher asked school administrators and others to allow the conduct of the study.

The researcher also reports any data used in the study in an aggregate manner to avoid making individual responses identifiable. The ethical standards were maintained while interpreting and presenting the findings, specifically with consideration for avoiding bias and ensuring the participants' experiences and perspectives are represented accurately. By adhering to these ethical standards, the researcher maintained the study's integrity and the trust of the participants

3. Results and Discussion
3.1 Demographic Profile of the Teacher-Respondents
This demographic information offered valuable insights into educators' varied backgrounds, experiences, and qualifications, which can significantly impact their teaching methods and effectiveness in inclusive environments. Typically, the demographic profile encompassed age, gender, and educational qualifications related to inclusive education practices.

3.1.1 Age and Gender
The distribution of respondents' age and gender is shown in Table 2 displays the ages and compares the frequency and percentage between female and male teachers within each age group.

Table 2. Profile of the Teacher Respondents

Profile Variable	f	%
Age		
21 - 30	12	34.29
31 - 40	11	31.43
41 - 50	12	34.29
Gender		
Male	2	5.71
Female	33	94.29
Total	**35**	**100.00**

The data in Table 2 reveal that respondents' ages were evenly distributed between the age brackets of 21-30 (34.29%) and 41-50 (34.29%), with a slightly smaller group in the 31-40 range (31.43%). This indicated a balanced representation of younger and middle-aged participants, reflecting diversity in age and potentially varying levels of professional experience. Regarding gender, a significant majority (94.29%) were female, while only 5.71% were male. This imbalance suggested that the field or context in which this study was conducted may be dominated by women, which was common in specific educational or caregiving professions.

It is also worth noting that the gender ratio of subjects (high representation of females) might well play a role in explaining these data. In intervention settings dominated by women, such as education or nursing, experiences with gender could influence the ways that participants approached and responded to work-related challenges. Moreover, the diversity of ages indicated that any interventions or strategies discussed in the study should consider varying levels of professional experience, with younger participants possibly needing mentoring, and older participants having considerable practical knowledge.
In the context of inclusive education, this meant looking at how teacher preparedness and readiness to embrace inclusive practices varied with gender and age differences, for example. It could influence classroom dynamics and the nature of the supports needed to promote inclusion, given that there is such a large female teacher body.

Research has recently endorsed that teacher demographics, age, and gender, for example, have impacted educational success. A study by López-Cobo et al. (2022) investigated the influence of teachers' gender and age on their attitudes towards and use of inclusive practice. It found that female teachers tended to be more empathetic and adaptable in inclusive classrooms. Likewise, a different study by Bas et al. (2021) found that the older (more than 40 years in age) and experienced teachers were more inclined to adopt innovation in pedagogies than the younger, less experienced teachers.

Moreover, Suhonen et al. (2020) described how in these female-dominated sectors, and especially in education, gender can influence the culture of collaboration within the work environment, resulting in stronger support structures, as well as challenges in terms of gender diversity and equity. Seven out of ten respondents were female, and ages ranged from 14-60, suggesting that

despite an even spread of respondents by sex, findings discussed may vary by age and gender-related expectations as throughout the review paper. Upshot these findings suggest that interventions should be sensitive to gender, age, and general context difference and how this general context may biased the effectiveness of interventions (especially in professional settings like Topology where females were in the majority) Such future research should also investigate how these factors interacted with professionalization and inclusion to make sure that training and vital support mechanisms were responsive to the various needs educators have.

3.1.2 Highest Educational Attainment
The respondents' highest educational attainment distributed among categories with their frequencies and percentages are shown in Table 3.

Table 3. Teacher Respondents' Highest Educational Attainment (n=35)

Profile Variable	f	%
Baccalaureate Degree	3	8.57
with MA/MS units	26	74.29
MA/MS	5	14.29
Ph.D./Ed.D.	1	2.86
Total	**35**	**100.00**

The data showed that most of the respondents, 74.29%, had earned MA/MS units, indicating that most participants were pursuing or had begun postgraduate education. A smaller portion of the respondents, 14.29%, had completed a master's degree (MA/MS), while 8.57% had only a baccalaureate degree. Only one respondent, representing 2.86%, had achieved a doctoral degree (Ph.D./Ed.D.). This suggested that most respondents were at various stages of their academic advancement beyond the bachelor's degree level.

This educational profile gave a good picture of a highly educated group of respondents, with most pursuing advanced degrees. This had several consequences for professional practices, particularly in fields such as education or specialized contexts where higher education was associated with advanced pedagogical strategies, leadership, or decisional practices. The data suggested that the respondents had the theoretical knowledge and the skills needed to facilitate and participate in higher-order processes, which would bode well for their participation in roles requiring such skills (e.g., inclusive education or specialized services).

The 74.29 percent still studying their units in postgraduate studies depicted a great will to pursue more in the professional side of operations. This group would benefit from programs facilitating their continuing education, such as workshops on research methods or grants for advanced studies. The relatively low percentage of respondents (8.57%) with only a baccalaureate degree implied that many were either newer to the profession or working in a profession that requires less than a higher degree. Having just one person with a PhD might indicate that leadership and expertise were lacking.

Current research supported the idea that advances in education among professionals and teachers improved students' teaching, innovation, and engagement in the classroom. A study by Comon and Corpuz (2024) investigated the impact of graduate-level education on teachers' instructional styles and found that teachers with either MA/MS units or degrees performed at a higher level in adaptable and creative instruction. In the same manner, Engida et al. (2024) study found that when teachers engaged in postgraduate education, they reflected upon what they taught, which, in turn, enabled them to teach more effectively by meeting the needs of students.

In addition, obtaining master's degrees has been correlated with improved leadership capabilities. According to Maviş Sevim and Akın (2021), teachers with postgraduate qualifications were more likely to take leadership positions in schools and promote improvements in curriculum and policies to enhance student learning outcomes.

Most respondents had been in postgraduate studies or higher, illustrating a very educated group. Such educational advancement would surely reflect better professional practices in specialization skills and knowledge fields. It highlighted the great practice of continuous learning that may broaden their opportunities for leadership and innovation in their fields.

3.2 Level of Performance in the Application of Strategies of the Teacher-Respondents
One of the most essential aspects of assessing the effectiveness of inclusive education is evaluating general education instructors' application of strategies. This performance directly impacts instructors' ability to address the various requirements of all students, especially those with different backgrounds and abilities.

3.2.1 Strategies

One of the specific factors affecting inclusive education is the possible effect of methods used by general education teachers because the general education teachers are expected to be equipped with different teaching skills to meet the needs of the wide-ranging diversity of students in a classroom, including students with special needs. The effectiveness of inclusion relies heavily upon teachers' mastery of strategies like differentiated instruction, cooperative learning, and individualized supports that engage students with varied learning profiles (Stingo,2024).

Table 4. Level of Performance of the Teacher Respondents (STRATEGIES)

S/N	Indicators	$\bar{x}$	Median	sd	Verbal Description
1	Differentiated instruction is used in the classroom.	3.83	4.00	0.38	Strongly Agree
2	Cooperative learning strategies are implemented in the classroom.	3.89	4.00	0.32	Strongly Agree
3	The curriculum is adapted to meet the needs of diverse learners	3.89	4.00	0.41	Strongly Agree
4	Assessments are modified to accommodate students with special needs	3.77	4.00	0.43	Strongly Agree
5	Collaboration with special education professionals supports inclusive practices	3.66	4.00	0.48	Strongly Agree
6	Cooperative learning strategies are implemented.	3.86	4.00	0.36	Strongly Agree
7	The curriculum is adapted to meet the needs of diverse learners	3.77	4.00	0.43	Strongly Agree
8	Assessments are modified to accommodate students with special needs	3.74	4.00	0.44	Strongly Agree
9	Collaboration with exceptional education professionals supports inclusive practices	3.77	4.00	0.43	Strongly Agree
	Overall Rating	3.79	4.00	0.41	Strongly Agree

Legend: *3.26 - 4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 - 1.75 Strongly Disagree*

Table 4 presented the level of performance of teacher respondents in implementing strategies within inclusive classrooms. The overall area of concern, "Practical Techniques," received a weighted mean of 3.79, verbally interpreted as "Strongly Agree." The highest-rated strategy was the implementation of cooperative learning strategies (3.89), while the lowest was collaboration with exceptional education professionals (3.66). The minor standard deviations (ranging from 0.32 to 0.48) indicated relatively consistent teacher responses.

All strategies evaluated, including differentiated instruction, curriculum adaptation, and assessment modification for students with special needs, were rated highly, suggesting that teachers strongly agree that they effectively use these techniques in inclusive classrooms.

This included differentiation, cooperative learning, curriculum, and assessment adaptation, which indicated that teachers were highly competent to conduct inclusive education in this context. Our slightly lower rating for collaboration with exceptional education professionals (3.66) probably means that we could improve interdisciplinary cooperation, which could give stronger results in the practice of inclusion.

This suggested that one area of professional development that was sorely needed and may helped with the collaboration between general and special education teachers should be a focus of efforts to improve professional development (Germuth, 2018). With a good overall performance in other areas, more focused efforts to improve how teachers worked together and created richer professional networks would helped raise the quality of inclusive education even further.

These findings echoed research carried out in recent years, which, among other things, highlighted the significance of differentiated learning and cooperative learning approaches in inclusive classrooms (Ismail & Al Allaq, 2019).

A current study by Langelaan et.al.(2024) highlighted the significance of differentiated instruction as an essential practice in inclusive classrooms that positively impacted student engagement and achievement. Strong teacher agreement with the use of differentiated teaching in the classroom was also discovered in the current study, which supported other studies showing how beneficial this strategy was at fostering inclusive education.

Moreover, cooperative learning strategies, which received the highest rating in the current study, had been widely recognized as effective in promoting inclusion. For example, Chakyarkandiyil and Prakasha(2023) highlighted that cooperative learning created an environment where students worked together, supporting the academic and social integration of students with diverse needs. This finding was consistent with the current study's high ratings on cooperative learning practices.

However, the slightly lower score on collaboration with exceptional education professionals highlighted a gap that other studies had identified. According to Aporbo (2023), effective inclusion required strong collaboration between general and special education teachers. Their study found that when teachers worked closely with special education professionals, students with special needs received more tailored support, which enhanced learning outcomes. The current study suggested that while teachers were implementing inclusive strategies effectively, there was a need to improve interdisciplinary collaboration to maximize the benefits of inclusion.

The findings indicated that teachers strongly agreed that implementing practical techniques, such as differentiated instruction, cooperative learning, and curriculum adaptation, was essential for inclusive education. However, the lower score for collaboration with exceptional education professionals suggested a need for improvement in interdisciplinary teamwork. Future initiatives should focus on strengthening these collaborative efforts to ensure comprehensive support for students with special needs.

3.2.2 Intervention

When evaluating the effect of general education teachers' methods on the achievement of inclusive education, the performance level of teacher responders in executing different interventions was a crucial consideration. In order to effectively meet the different needs of students, especially those with disabilities or learning challenges, tailored instructional methodologies, behavioral support networks, and customized learning plans are essential components of effective treatments.

Table 5. Level of Performance of the Teacher Respondents (INTERVENTION)

S/N	Indicators	$\overline{x}$	Median	sd	Verbal Description
10	Differentiated instruction is used in the classroom.	3.97	4.00	0.17	Strongly Agree
11	Cooperative learning strategies are implemented in the classroom.	3.94	4.00	0.24	Strongly Agree
12	The curriculum is adapted to meet the needs of diverse learners	3.80	4.00	0.41	Strongly Agree
13	Assessments are modified to accommodate students with special needs	3.71	4.00	0.46	Strongly Agree
14	Collaboration with special education professionals supports inclusive practices	3.74	4.00	0.44	Strongly Agree
	Overall Rating	3.83	4.00	0.37	Strongly Agree

Legend: *3.26 - 4.00 Strongly Agree, 2.51 – 3.25 Agree, 1.76 – 2.50 Disagree, 1.00 - 1.75 Strongly Disagree*

Table 5 reflects the level of performance of teacher respondents in implementing interventions in an inclusive education setting. The overall weighted mean for the intervention strategies was 3.83, verbally interpreted as Strongly Agree, indicating that teachers were confident in the effectiveness of their interventions. Among the specific strategies, "Differentiated instruction improved student outcomes" received the highest rating (3.97), while "Assessment modifications accurately measured the abilities of students with special needs" received the lowest (3.71). The minor standard deviations, ranging from 0.17 to 0.46, reflected consistency in responses.

The data suggests that teachers believed differentiated instruction and cooperative learning strategies were particularly effective in improving student outcomes and engagement. The high ratings indicated that teachers perceived these interventions as

essential in meeting the needs of diverse learners. However, the lower rating for assessment modifications (3.71) implied that teachers may still face challenges in accurately measuring the abilities of students with special needs, which could be a focal area for future professional development or curriculum reform. The effectiveness of curriculum adaptation (3.80) and teacher intervention in inclusive setups (3.74) also received strong ratings, indicating that these practices contributed to a positive learning environment. However, continuous support and training could help refine these interventions to maximize their impact, particularly in inclusive settings where students with diverse learning needs require highly tailored support.

The findings align with recent studies that emphasize the role of differentiated instruction and cooperative learning in inclusive education. For instance, according to a study by Gheyssens et al. (2023), differentiated instruction has been shown to significantly improve student outcomes, particularly in inclusive classrooms where diverse learning needs must be addressed. The strong agreement among teachers in this study that differentiated instruction improved student outcomes supported the growing body of research advocating tailored teaching methods

In parallel, research by Tranet.al. (2019) reinforced the importance of cooperative learning in enhancing student engagement, particularly for students in inclusive classrooms. Cooperative learning had increased interaction among students with special educational needs, leading to a supportive learning environment. This was situated with the present study's result, which showed that teachers strongly agreed that cooperative learning strategies were effective. However, the relatively lower rating for assessment modifications reflected findings from a study by Deysolong et al. (2023), which noted that many teachers struggled with modifying assessments to accurately reflect the abilities of students with special needs. The study pointed out the need for better training and resources to help teachers design and implement equitable and accurate assessments for diverse learners.

The results indicated that teachers believed their interventions, such as differentiated instruction and cooperative learning, effectively improved student outcomes and engagement in inclusive classrooms. Nevertheless, the data also mean there was room for advancement in assessment abatement for learners with special educational needs. The findings were fixed with recent research, stressing the importance of tailored teaching methods in inclusive settings and emphasizing the ongoing challenges in assessment practices. Continuous training in assessment modifications would help teachers better support the diverse learners in their classrooms, ensuring more equitable and accurate evaluations of student progress.

3.3 Significance of the Relationship Between the Demographic Profile and the Level of Performance of the Teacher Respondents

Assessing the impact of educational methods, particularly in the context of inclusive education, requires understanding the relationship between teachers' performance and their demographic characteristics. Factors such as age, gender, educational background, and prior teaching experience can significantly impact teachers' use of instructional techniques and interventions in diverse classrooms. By examining these connections, trends may be found that can direct professional development programs and best practices in the classroom. The data are shown in Table 6.

Table 6. Level of Performance of the Teacher Respondents (INTERVENTION)

Paired Variables			Multiple R	R Square	*p*-value	Significance
Profile and Strategies			*0.368*	*0.135*	*0.2038*	Not Significant
Age					0.225	Not Significant
Gender					0.104	Not Significant
Education					0.676	Not Significant
Profile and Intervention	*0.20*	*0.043*			*0.773*	Not Significant
Age					0.470	Not Significant
Gender					0.343	Not Significant
Education					0.546	Not Significant

*α = 0.05, * significant at p < 0.05*

Table 6 presents the significance test for the correlation between teachers' profiles (age, gender, education) and their performance regarding strategies and interventions in inclusive classrooms. The multiple R-values showed a weak positive correlation between teacher profile variables and performance in strategies (0.368) and interventions (0.207). However, the P-values (0.2038 and 0.773) indicated that these correlations were not statistically significant, meaning that there was no substantial evidence to suggest that a teacher's age, gender, or education level significantly affected their performance in implementing strategies or interventions.

Age, gender, and education all showed no significant relationship with strategy or intervention performance, as their P-values were greater than 0.05. Education had a slightly higher multiple R-value (0.676) when correlated with strategies, but the result remained insignificant. The lack of a significant correlation between teacher profiles and performance suggested that factors such as age, gender, or level of education do not strongly influence teachers' effectiveness in applying strategies and interventions for inclusive education. This implied that regardless of demographic differences, teachers were likely to perform consistently in terms of their ability to implement inclusive practices. The findings highlighted the potential effectiveness of standardized training programs, which could be designed to ensure that all teachers, regardless of their background, were equipped with the necessary skills to apply inclusive strategies.

Given that education, explicitly having advanced degrees (MA/MS or PhD), did not significantly correlate with performance, this finding suggested that practical experience or professional development might play a more crucial role than formal qualifications in enhancing teachers' capacity to implement inclusive education strategies effectively. When studies explored the impact of demographic characteristics in inclusive settings, they showed conflicting results. Malik et al. (2021) investigated the link between inclusive education and teacher demographics and performance. And they found no strong relationship between teacher age or gender and effectiveness, as with the current study. Demographic context factors appeared to have decreased in their impact on the effectiveness of inclusive teaching since new teacher preparation likely because good preparation for and ongoing professional development in inclusive teaching were more effective than the influence of demographic context factors.

Though some of the studies highlighted the importance of education level in other specific cases. For example, Jones et al. (2020) proposed that higher education, particularly in specific domains such as special education might enhance the teachers' skills to individualize instruction and modify assignments to suit their students' levels. The current study, which found no significant correlation between education and performance, might suggest that formal education alone was insufficient and that professional experience and targeted training were more impactful in practice. Furthermore, Wang and Hall's (2022) study specified that continuous professional development, rather than demographic factors like age or education level, had the strongest influence on teachers' success in inclusive settings. This strengthened the importance of strong learning opportunities that allowed teachers to improve their skills, as evidenced by the results of the present study.

The findings revealed no significant correlation between teacher profiles (age, gender, education) and their performance in implementing strategies and interventions for inclusive education. This suggested that demographic factors were not strong determinants of teacher effectiveness in inclusive classrooms. Instead, the results underscored the importance of consistent, high-quality professional development that equipped all teachers with the practical skills necessary for inclusive teaching.

3.4 Challenges the Teacher Respondents Encountered When Integrating Practical Techniques and Interventions
Fostering inclusive education required integrating practical strategies and interventions in the classroom; nevertheless, teacher responders frequently faced various difficulties in this process. Lack of proper training and professional development could be a significant barrier, leaving teachers ill-prepared to adopt inclusive practices and modify their lesson plans to accommodate a range of student requirements. The data are shown in Table 7.

Table 7. Challenges Encountered by the Teachers When Integrating Practical Techniques and Interventions

Area of Concern	Weighted Mean	Median	SD	Verbal Interpretation
CHALLENGES ENCOUNTERED	3.33	3.00	0.61	Strongly Agree
1. I face significant challenges in implementing inclusive education practices.	3.51	4.00	0.51	Strongly Agree
2. I have effective strategies to address the challenges of implementing inclusive education practices.	3.26	3.00	0.44	Strongly Agree
3. I find it difficult to adapt the curriculum to meet the diverse needs of learners.	2.57	2.00	0.81	Agree
4. I am confident in my ability to modify the curriculum to cater to the needs of all students.	3.51	4.00	0.56	Strongly Agree
5. Assessments are challenging to modify for students with special needs.	3.66	4.00	0.48	Strongly Agree
6. I have appropriate strategies for adapting assessments to accommodate students with special needs.	3.37	3.00	0.49	Strongly Agree
7. Collaboration with exceptional education professionals is crucial for supporting inclusive practices.	3.31	3.00	0.47	Strongly Agree
8. I effectively collaborate with exceptional education professionals to enhance inclusive education.	3.29	3.00	0.46	Strongly Agree
9. I feel supported by my school administration in implementing inclusive education practices.	3.51	4.00	0.66	Strongly Agree
10. I receive adequate training to help me effectively integrate inclusive education practices into my teaching.	3.31	3.00	0.47	Strongly Agree

Table 7 illustrates teachers' challenges when integrating practical techniques and interventions in inclusive education settings. The overall weighted mean of 3.33 indicated that teachers "Strongly Agree" faced significant challenges in implementing inclusive practices. Among the specific areas, modifying assessments for students with special needs was perceived as the most challenging (mean = 3.66). At the same time, difficulty in adapting the curriculum had a lower weighted mean of 2.57, which was verbally interpreted as "Agree." Teachers felt confident in modifying the curriculum (mean = 3.51) and collaborating with exceptional education professionals (mean = 3.29). Yet, they still identified significant obstacles, especially regarding assessment modifications and administrative support.

These findings suggested that while teachers feel somewhat confident in their ability to modify the curriculum and collaborate with other professionals, they still faced considerable challenges, particularly in adapting assessments for students with special needs. This highlighted a gap in either resources or training, implying the need for more targeted support and professional development focused on assessment strategies for diverse learners.

Furthermore, the data showed that while teachers acknowledged the importance of collaboration and school administration support, the lower mean scores related to effective collaboration and administrative support implied that these areas could be strengthened. Providing more opportunities for team-based professional learning and enhancing school support systems could significantly reduce teachers' challenges in inclusive classrooms.

The significant challenge in modifying assessments underscored the need for teacher training in this area, which was crucial for ensuring that assessments fairly and accurately measured the abilities of all students, especially those with special needs. The verbal interpretation of "Strongly Agree" regarding the difficulty of assessment adaptation (mean = 3.66) aligned with studies emphasizing the complexity of inclusive assessment practices.

Recent literature documented the challenges teachers face in implementing inclusive education practices well. For instance, a study by Mishra et al. (2019) identified curriculum adaptation and assessment modification as two of the most significant challenges in inclusive education. Teachers in their study echoed the current findings, particularly in struggling to develop assessments that accurately measured the abilities of students with special needs. This suggested that ongoing professional development and resources focused on assessment practices are critical for inclusive education success.

Similarly, research by Woodcock et al. (2022) highlighted the importance of teacher confidence and collaboration in inclusive education. While teachers in the current study reported confidence in their ability to modify the curriculum (mean = 3.51), they acknowledged that collaboration with special education professionals (mean = 3.29) and administrative support (mean = 3.51) was crucial to effectively implementing inclusive practices. Sharma and Loreman's findings supported this view, arguing that successful inclusion depended heavily on a supportive school environment and stakeholder collaboration.

Furthermore, a study by Ackah (2020) emphasized the necessity of sustained professional development for teachers to address challenges in inclusive settings. Teachers in this study expressed that while they received some training (mean = 3.31), it might not be sufficient to fully equipped them with the strategies needed to address the complexity of inclusive education, particularly in modifying assessments. Florian and Beaton argued for a more sustained and practical approach to teacher training that addresses these persistent challenges.

The results indicated that while teachers generally felt confident in their ability to modify the curriculum and collaborate with special education professionals, they still faced significant challenges in adapting assessments for students with special needs. This finding underscored the importance of providing more targeted support, professional development, and resources to help teachers addressed the complex challenges of inclusive education. Recent studies aligned with these findings, indicating that the most significant barriers in inclusive education relate to assessment adaptation and the need for more vital collaboration and administrative support. To address these challenges, schools must prioritized continuous teacher training and foster more robust collaborative environments within their educational settings.

4. Conclusion and Recommendations

The study highlighted that while teachers in inclusive education settings demonstrated strong capabilities in applying practical techniques such as differentiated instruction, cooperative learning, and curriculum adaptation, significant challenges persist, particularly in modifying assessments for students with special needs. Despite their confidence in implementing inclusive practices, the lack of significant correlation between teachers' demographic profiles and their performance suggested that professional development and support should be universally applied, regardless of age, gender, or education level. Continued efforts to enhance teacher collaboration with special education professionals and provided more resources for assessment modifications were essential for further improving the effectiveness of inclusive education.

Further research on the impact of teaching experience and school support systems was recommended, alongside continuous professional development for all teachers. Focused professional development on assessment modification and enhancing collaboration with special education professionals was needed. Future research should explore other factors, such as teaching experience and school context that might influence the effectiveness of inclusive strategies. Training on inclusive assessment practices and assistive technologies should be prioritized, along with regular collaboration between general and special education teachers. Implemented mentorship systems and shared resources to help teachers modified assessments and improved inclusive education practices.

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