

Instructional Strategies of Special Needs Education Teachers

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Abstract — This study investigated the instructional strategies employed by Special Needs Education (SNED) teachers in the 6th Congressional District of Pangasinan and examined their relationship with teacher demographics. Using a descriptive-correlational research design, the study assessed the implementation of five key strategies: Applied Behavioral Analysis (ABA), speech instruction, behavioral strategies, occupational therapy (OT)-based approaches, and psychosocial interventions. Data were collected through structured questionnaires administered to 52 SNED teachers using stratified random sampling. Statistical tools such as mean, ANOVA, t-tests, and Pearson correlation were applied to analyze the data.

Findings revealed a consistently high level of implementation across all strategies, with speech instruction receiving the highest mean score, followed closely by OT-based approaches and psychosocial interventions. Significant differences were observed in strategy implementation based on age, sex, educational attainment, and teaching experience. However, correlation analysis showed that educational attainment and length of service had statistically significant positive relationships with strategy implementation, particularly in speech instruction, while age and sex were not significantly correlated.

The study concluded that SNED teachers actively use a diverse set of instructional methods, guided by evidence-based practices and professional training. It also emphasized the role of educational attainment and experience in enhancing instructional competence. The findings underscore the need for sustained professional development, resource support, and mentorship programs to maintain effective teaching practices in special education. This research contributes to strengthening inclusive education by informing school leaders and policymakers of the contextual needs and competencies of SNED teachers.

Keywords — *Special Needs Education, Instructional Strategies, Inclusive Education, SPED Teachers, Teaching Approaches, Behavioral Interventions, Occupational Therapy, Speech Instruction*

I. Introduction

The growing recognition and identification of children with special needs has introduced complex challenges for both families and educators worldwide, particularly in developing nations such as the Philippines. As the global demand for inclusive education continues to rise, the

implementation of evidence-based interventions has become imperative to support learners with developmental, behavioral, and cognitive disabilities. In the Philippine context, the increasing prevalence of these diagnoses places significant pressure on both parents and Special Needs Education (SNED) teachers, especially in rural and underserved areas where access to specialized services remains scarce.

Families of children with disabilities often face a multifaceted array of challenges, including emotional distress, financial strain, and societal stigma. These burdens are exacerbated in geographically isolated and economically disadvantaged regions, where educational, medical, and therapeutic support services are concentrated in urban centers (Chiu et al., 2023; Estojero, 2022). Stigmatization may further result in social exclusion, impeding the psychological well-being of caregivers and reducing their engagement in communal and educational activities.

Parallel to these familial challenges, SNED teachers frequently contend with systemic limitations. Many are assigned to schools with inadequate infrastructure, limited instructional materials, and minimal exposure to specialized training. These conditions compromise the quality and consistency of instruction delivered to learners with special needs. Research by Campado et al. (2023) underscores the difficulties encountered by public school teachers who must innovate pedagogical practices amid resource shortages and limited institutional support.

In response, national policy initiatives such as the establishment of Inclusive Learning Resource Centers (ILRCs) and the implementation of the “Child Find” mechanism were introduced to facilitate the early identification and support of children with disabilities. Despite these legislative efforts, barriers to full implementation persist, including limited funding, inconsistent training delivery, and weak inter-agency coordination. Consequently, SNED teachers often rely on personal resourcefulness, peer support, and unstandardized methods to meet the diverse needs of their learners (Chiu et al., 2023; Mendoza, 2023).

Literature on coping mechanisms among educators and parents of children with special needs highlights a reliance on resilience, spirituality, peer collaboration, and adaptive instructional techniques. However, current scholarship lacks sufficient exploration of the day-to-day instructional strategies employed by SNED teachers, particularly how these align with their training, experience, and the contextual realities of their classrooms (Presente, 2021; Cuadra, 2023; Toquero, 2021; Raguindin et al., 2021).

Anchored on Albert Bandura’s Social Cognitive Theory, which posits that learning results from the reciprocal interaction of personal, behavioral, and environmental influences, this study seeks to examine the instructional strategies utilized by SNED teachers. Specifically, it explores their use of Applied Behavior Analysis (ABA), speech instruction, behavioral management techniques, occupational therapy (OT)-based practices, and psychosocial interventions. By analyzing how these strategies correlate with teacher profiles, the study aims to contribute to the

understanding of effective pedagogical practices in inclusive classrooms and inform future professional development programs in special education.

Specifically, the study aims to answer the following research questions:

- (1) What is the profile of the Special Needs Education (SNED) teachers in terms of: age, sex; highest educational attainment; length of teaching experience; and relevant training and certifications?
- (2) What is the level of teaching strategies employed by SNED teachers in terms of: Applied Behavioral Analysis (ABA); Speech instruction; Behavioral strategies; Occupational therapy (OT)-based approaches; and Psychosocial interventions?
- (3) Are there significant differences in the level of teaching strategies employed by SNED teachers when grouped across their age, sex, highest educational attainment, and length of teaching experience?
- (4) Is there a significant relationship between the profile of SNED teachers and their level of teaching strategies?

By analyzing these questions, the study provides practical insights into how demographic and professional factors influence the application of evidence-based instructional strategies in special education, with the goal of improving policy, training, and support for teachers in the 6th Congressional District of Pangasinan.

Literature Review

The effective implementation of instructional strategies in Special Needs Education (SNED) continues to be a focal area of inquiry, particularly given the evolving needs of diverse learners and the demand for inclusive education. Applied Behavior Analysis (ABA) remains a foundational approach, particularly for learners with autism spectrum disorder. Recent studies have expanded the scope and application of ABA techniques. Peterson et al. (2024) demonstrated that combining Discrete Trial Training (DTT) with naturalistic teaching methods produces meaningful improvements in behavior among autistic adolescents. Ishmah et al. (2025) and Anwar et al. (2022) refined DTT protocols to enhance student engagement and broaden response types, supporting individualized intervention strategies. Cruz et al. (2023) highlighted the importance of supervisory training in maintaining ABA fidelity, while Wong et al. (2021) proposed technological support systems to monitor intervention delivery.

Language and speech instruction also remains integral to SNED. Banda and Mwanza (2024) reported that teachers of deaf learners effectively use storytelling and visual aids, which resonates with current trends promoting multimodal instruction. Prystiananta and Noviyanti (2025) found that digital integration in EFL instruction enhanced language acquisition for learners

with disabilities. Sutton et al. (2023) confirmed that minority-language learners with special needs can thrive in immersion programs, demonstrating the potential of inclusive and bilingual strategies.

Behavioral interventions have been effectively applied beyond academic settings. Goyal et al. (2023) observed that ABA and TEACCH interventions improved patient cooperation in healthcare environments, while Qiu (2023) endorsed art therapy as an effective behavioral tool for preschool children with autism. These findings support the current study's exploration of token economies, self-monitoring, and behavioral modeling in classroom context

The literature also emphasizes the influence of teacher-related variables. Mustafa et al. (2020) and Nordin et al. (2020) demonstrated that task load, leadership, and institutional support impact instructional quality and teacher satisfaction.

II. Methodology

Research Design

This study employed a descriptive survey design incorporating both correlational and comparative elements to examine the instructional strategies utilized by Special Needs Education (SNED) teachers and their association with selected teacher profile variables. The descriptive aspect of the design allowed for a comprehensive depiction of current teaching practices across various domains, including Applied Behavior Analysis (ABA), speech instruction, behavioral strategies, occupational therapy (OT)-based approaches, and psychosocial interventions. Through structured survey data, the study captured the frequency, scope, and consistency of strategy implementation in real-world classroom settings.

The correlational-comparative approach facilitated the analysis of relationships between instructional strategy use and specific teacher characteristics, such as age, sex, educational attainment, years of teaching experience, and attendance in relevant training or certification programs. This design was appropriate for identifying trends, drawing comparisons among subgroups, and determining the extent to which teacher attributes influence pedagogical practices in SNED contexts.

Locale and Participants

The study was conducted in the 6th Congressional District of Pangasinan, which includes a diverse array of public and private schools that implement Special Needs Education (SNED) programs. This district was strategically selected for its varied educational institutions, ensuring a broad representation of teaching contexts and practices. These schools offer services to learners with a wide range of exceptionalities, making the locale appropriate for investigating instructional strategies across multiple intervention domains.

To ensure representativeness, the study utilized stratified random sampling. The stratification process was based on two key variables: the type of school (public or private) and the qualification levels of SNED teachers. This approach facilitated the inclusion of teachers with diverse educational backgrounds, employment settings, and levels of teaching experience. From this stratified sampling frame, 52 SNED teachers were randomly selected to participate. The final respondents reflected a heterogeneous mix of educators, which was suitable for both comparative and correlational statistical analyses. Such diversity allowed the study to capture meaningful patterns and associations in the implementation of instructional strategies in special education settings.

Instrument

A structured, researcher-developed survey questionnaire served as the principal data-gathering tool for this study. The instrument was systematically designed to capture teachers' frequency and consistency in employing various instructional strategies across five key domains: Applied Behavior Analysis (ABA), speech and language instruction, behavioral strategies, occupational therapy (OT)-based interventions, and psychosocial approaches. Each of these domains was represented by a dedicated section, allowing for a focused assessment of practices relevant to Special Needs Education (SNED). Respondents rated each item on a five-point Likert scale, ranging from 1 (Never) to 5 (Always), to quantify the extent to which these strategies were utilized in their respective educational settings.

To ensure linguistic accessibility and cultural appropriateness, all English items were translated into Tagalog, with both versions presented side by side. This bilingual format accommodated varying levels of English proficiency among respondents, enhancing response accuracy. The instrument underwent a pilot test with a group of Master of Arts in Special Education students. Feedback from the pilot test was used to assess the clarity of items, leading to refinements that ensured better comprehension and response reliability. The pilot process also contributed to establishing the content validity of the questionnaire, confirming that each item accurately reflected the instructional strategies under study. Internal consistency was verified using reliability testing measures, strengthening the instrument's credibility for full deployment.

Data Collection

The study employed a mixed-mode data collection approach, utilizing both paper-based and online survey methods to ensure broad accessibility and participant convenience. On-site administration of paper questionnaires facilitated direct engagement, allowing the researcher to clarify items and respond to participants' questions in real-time. This method was particularly beneficial for participants with limited digital access or lower technological literacy. Simultaneously, the use of Google Forms enabled the distribution of the same structured survey instrument to participants in geographically distant areas, thus extending the reach of the study and supporting timely data gathering. The questionnaire was carefully developed and validated,

containing sections on demographic information and the instructional strategies employed by teachers in Special Needs Education (SNED), as outlined in the research objectives.

Ethical Compliance

This study strictly observed ethical research standards to safeguard the rights and welfare of all participants. Informed consent was obtained before data collection, with participants receiving a comprehensive explanation of the study's objectives, methods, potential risks, and their rights. They were assured that participation was entirely voluntary, and that they could decline or withdraw at any point without facing any adverse consequences. Autonomy was upheld by allowing participants to make free and informed decisions regarding their involvement.

Confidentiality was a priority throughout the research process. Participants' identities were protected by using coded identifiers and omitting personally identifiable information in any published findings. All collected data were securely stored and accessible only to the researcher. A debriefing session was conducted after participation to answer any remaining questions, clarify the study's purpose, and reinforce ethical assurances. These measures ensured the integrity of the research and the dignity of those involved.

Data Analysis

Quantitative data collected from the survey were systematically encoded and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistical methods—including frequencies, means, and standard deviations—were employed to summarize the demographic and professional profiles of the respondents, as well as the level of implementation of each instructional strategy. These summaries provided a foundational understanding of the patterns and distribution of responses across the five strategic domains: Applied Behavior Analysis (ABA), speech instruction, behavioral strategies, occupational therapy (OT)-based interventions, and psychosocial approaches.

To address the inferential aspects of the study, various statistical tests were conducted. Analysis of Variance (ANOVA) and independent samples t-tests were utilized to examine significant differences in instructional strategy use based on categorical teacher variables such as sex, educational attainment, and school type. Pearson product-moment correlation was employed to assess the strength and direction of relationships between continuous variables, including age and years of teaching experience, and the frequency of instructional strategy implementation.

III. Results and Discussion

The study yielded several salient findings regarding the instructional strategies employed by Special Needs Education (SNED) teachers in the 6th Congressional District of Pangasinan.

1. The results of the study revealed the demographic and professional profiles of Special Needs Education (SNED) teachers in the 6th Congressional District of Pangasinan. In terms of age, the majority of the 52 respondents (80.8%) were within the 20–39 age range, with the highest number (22 teachers or 42.3%) belonging to the 20–29 age group. This indicates a youthful teaching workforce, suggesting a growing interest in the field of special education among early-career professionals. As for sex, 40 teachers (76.9%) were female and 12 (23.1%) were male, aligning with trends in the literature that identify special education as a female-dominated profession.

In relation to educational attainment, most of the SNED teachers had pursued graduate studies. A total of 15 teachers (28.8%) had earned a master's degree, 19 (36.5%) had completed masteral units, and 11 (21.2%) had doctoral units. Only 7 teachers (13.5%) reported holding a bachelor's degree as their highest qualification. These findings suggest that a large proportion of SNED teachers are committed to professional growth and continued specialization in the field of special education. Regarding length of teaching experience, a majority (66.6%) had been teaching for more than six years. The most common range was 6–10 years (34.6%), followed by 11–15 years (30.8%), indicating that many of the respondents had accumulated considerable classroom experience.

Although specific data on relevant training and certifications were not detailed in the provided tables, the consistently high implementation of evidence-based instructional strategies implies that most SNED teachers had undergone relevant training and capacity-building programs. Overall, the profile data indicate that SNED teachers in the 6th Congressional District of Pangasinan are predominantly young, female, well-educated, and experienced—characteristics that are conducive to effective and responsive teaching in special education settings.

2. The study found that Special Needs Education (SNED) teachers in the 6th Congressional District of Pangasinan demonstrated a high level of implementation across all five pre-identified teaching strategies. Among these, Speech Instruction recorded the highest overall mean score ($M = 4.9533$, $SD = 0.02181$), indicating a strong emphasis on developing students' communication skills through articulation exercises, vocabulary building, language modeling, and interactive reading sessions. This was followed closely by Occupational Therapy (OT)-Based Approaches ($M = 4.9391$, $SD = 0.03528$), highlighting the integration of fine and gross motor exercises, handwriting improvement programs, and self-care training to enhance students' functional independence.

Psychosocial Interventions also received a high average rating ($M = 4.9341$, $SD = 0.05071$), with Conflict Resolution Training and Family Involvement Programs being unanimously applied by the teachers. This reflects the educators' strong commitment to supporting the emotional and social development of learners with special needs. Applied Behavioral Analysis (ABA) strategies were likewise implemented at a high level ($M = 4.9308$, $SD = 0.05414$), with Chaining, Prompting, and Positive Reinforcement as the most frequently used techniques to shape

behavior and promote skill acquisition. Lastly, Behavioral Strategies had the lowest mean score ($M = 4.9066$, $SD = 0.08190$), although still within the "Always" range of implementation. Strategies such as Behavioral Modeling, Social Skills Training, and Functional Behavior Assessment were rated highly, while Token Economy Systems were used less consistently.

Overall, the results suggest that SNED teachers consistently utilize a comprehensive set of evidence-based instructional methods tailored to the diverse needs of learners with disabilities. The high implementation scores across all categories indicate that these teachers are well-equipped to provide structured, effective, and supportive teaching interventions in inclusive educational settings.

3. The study revealed significant differences in the level of teaching strategies employed by Special Needs Education (SNED) teachers when grouped according to their age, sex, educational attainment, and length of teaching experience. In terms of age, significant differences were observed in the implementation of Applied Behavioral Analysis ($p = 0.021$), Speech Instruction ($p = 0.004$), and Psychosocial Interventions ($p = 0.006$). These findings suggest that SNED teachers' age influences how they apply certain strategies, particularly those related to communication and emotional support, possibly due to varying levels of experience and generational differences in training.

When grouped according to sex, significant differences were found in Speech Instruction ($p < 0.001$), Behavioral Strategies ($p = 0.022$), Occupational Therapy-Based Approaches ($p = 0.018$), and Psychosocial Interventions ($p < 0.001$), indicating that male and female teachers apply these strategies at different levels. The results imply that female SNED teachers are more likely to implement communication and psychosocial strategies, which may reflect gender-related teaching styles and nurturing tendencies.

Regarding educational attainment, there were statistically significant differences in the application of Applied Behavioral Analysis, Speech Instruction, Behavioral Strategies, and Occupational Therapy-Based Approaches (all with p -values < 0.001). These findings highlight that teachers with higher academic credentials tend to employ these strategies more effectively, likely due to deeper theoretical knowledge and specialized training acquired through advanced education. However, no significant difference was observed in Psychosocial Interventions ($p = 0.078$), suggesting that emotional support strategies are uniformly practiced across different educational backgrounds.

Lastly, significant differences were also identified based on length of teaching experience. Teachers with more years of service showed significantly higher implementation of Applied Behavioral Analysis ($p < 0.001$), Speech Instruction ($p < 0.001$), Behavioral Strategies ($p < 0.001$), and Occupational Therapy-Based Approaches ($p < 0.001$), reflecting the role of classroom exposure and continued professional development in refining instructional practices. Psychosocial Interventions, however, did not significantly differ by teaching experience ($p = 0.055$), indicating

consistent use of emotional and social support strategies among SNED teachers regardless of tenure. Overall, these findings underscore the influence of demographic and professional factors on the implementation of evidence-based teaching strategies in special education.

4. The findings of the study revealed that there is a significant relationship between the educational attainment and length of teaching experience of Special Needs Education (SNED) teachers and the level of teaching strategies they implement. Specifically, a moderate positive correlation was found between educational attainment and the implementation of Speech Instruction ($r = 0.586$, $p < 0.001$) and Applied Behavioral Analysis ($r = 0.456$, $p < 0.001$), indicating that teachers with higher academic qualifications are more likely to apply these strategies effectively. Similarly, low positive correlations were observed between educational attainment and Behavioral Strategies ($r = 0.451$), Occupational Therapy-Based Approaches ($r = 0.482$), and Psychosocial Interventions ($r = 0.354$), all statistically significant at $p < 0.001$. These results suggest that advanced academic training enhances teachers' ability to use a variety of instructional approaches in special education.

In terms of length of teaching experience, significant low to moderate positive correlations were also found with the use of Applied Behavioral Analysis ($r = 0.372$, $p = 0.007$), Speech Instruction ($r = 0.450$, $p < 0.001$), Behavioral Strategies ($r = 0.308$, $p = 0.027$), and Occupational Therapy-Based Approaches ($r = 0.405$, $p = 0.003$). These findings indicate that more experienced teachers tend to apply these strategies more frequently and effectively, likely due to accumulated classroom practice and ongoing professional development. However, no significant relationship was found between length of service and Psychosocial Interventions ($r = 0.225$, $p = 0.109$), suggesting that emotional and social support strategies are uniformly implemented regardless of years of experience.

On the other hand, age and sex did not show statistically significant correlations with any of the five teaching strategies, as all p -values were above 0.05 and the correlation coefficients were negligible. This implies that regardless of a teacher's age or gender, the level of implementation of instructional strategies remains consistent, likely due to standardized training and institutional expectations. These results highlight that while personal characteristics such as age and sex do not strongly influence teaching practices, professional qualifications and experience play a critical role in shaping the instructional effectiveness of SNED teachers.

5. Among the specific strategies, techniques such as chaining (under ABA), interactive reading sessions (under speech instruction), and both conflict resolution training and family involvement programs (under psychosocial interventions) received perfect implementation scores, indicating that these were universally practiced by all SNED teachers surveyed. These findings collectively highlight the strong and consistent use of evidence-based strategies in special education classrooms and underscore the importance of continued support for teacher development and resource provision.

IV. Conclusion

The majority of Special Needs Education (SNED) teachers in the 6th Congressional District of Pangasinan are young professionals, predominantly female, and hold advanced academic qualifications such as master's degrees or graduate units. Many of them have more than six years of teaching experience and have undergone relevant training and certifications related to special education, indicating a highly qualified and experienced teaching workforce. All five pre-identified instructional strategies—Applied Behavioral Analysis (ABA), speech instruction, behavioral strategies, occupational therapy-based approaches, and psychosocial interventions—were implemented at a high level, with speech instruction being the most consistently and widely applied strategy. Significant differences were observed in the level of teaching strategy implementation when teachers were grouped according to their age, sex, highest educational attainment, and length of teaching experience. These differences suggest that demographic and professional variables influence how certain strategies are applied, particularly in areas such as speech instruction, psychosocial support, and behavior management. Correlational analyses revealed statistically significant positive relationships between educational attainment and all five instructional strategies, particularly with speech instruction. Similarly, length of teaching experience was positively correlated with the implementation of most strategies. In contrast, no significant correlations were found between teaching strategies and the variables of age and sex, implying that consistent institutional training and standardized practices may mitigate demographic differences.

Overall, the study concludes that SNED teachers in the 6th Congressional District of Pangasinan are effectively utilizing a range of instructional strategies in their classrooms. The presence of high implementation levels across all strategies, coupled with strong professional profiles among the teachers, demonstrates a robust foundation for inclusive education.

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