

Professional Development and Instructional Practices Among Special Education Teachers of Pardo Elementary School

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Abstract: This study aimed to analyze professional development undertakings concerning the extent of teachers' instructional practices in handling special education (SpEd) classes. This research employed a quantitative descriptive correlational research design with 10 SpEd Teachers from Pardo Elementary School as respondents. A researcher-made survey questionnaire was utilized. Employing weighted means to get the extent of the SpEd teacher's instructional practice in terms of (1) structured practices and (2) student-centered practices and the Chi-square test of independence and ANOVA in determining the significant relationship and difference. The study's empirical findings revealed that most of the teachers were 41-40 years of age and 50% of them were master's graduates. Having a different specialization with close to 3 to 6 years of teaching experience and mostly having a training of beyond 24 hours. Lastly, the Test of Significant Difference in the respondents' extent of instructional practices when grouped by age, Highest Educational Attainment, Years in Handling SpEd Classes, and Number of Training, Learning, and Development Attended presented no significant differences. Based on the findings of the study, the researcher concluded that the demographic profile of the respondents and their professional development undertakings did not directly correlate to the extent of the teacher's instructional practices in handling Special Education (SpEd) classes however, a proposed professional development plan can significantly contribute to total and holistic implementation of the sped teachers in their instructional practices.

Keywords: *Special education, Sentiments, Instructional Practices, Professional Development, Descriptive-correlational design, Cebu, Philippines*

1. Introduction

This study explores the relationship between professional development (PD) and the instructional practices of Special Education (SpEd) teachers in DepEd Cebu. Despite the creative strategies employed by SpEd teachers to address the unique needs of their students, many face challenges due to inadequate training in special needs education (Allam & Martin, 2021). Teachers in SpEd classrooms often feel unprepared and lack effective methods to work with students with disabilities, highlighting the need for targeted professional development to enhance their skills.

Globalization has led to diverse classrooms, with students from various cultural and ethnic backgrounds, including those with special needs. This requires teachers to adapt their pedagogies to create inclusive, culturally sensitive learning environments (Du Plessis et al., 2024). Professional development plays a vital role in equipping teachers with the knowledge and strategies necessary to address these challenges.

Although much research has focused on general teacher PD, there is limited literature on the specific needs of SpEd teachers. In Cebu City, a significant barrier is the lack of ongoing and varied PD opportunities, such as workshops and coaching, to improve instructional practices in SpEd settings. This study aims to fill this gap by investigating

the impacts of professional development programs on SpEd teachers' instructional effectiveness, ultimately contributing to the improvement of education for students with special needs. By addressing these gaps, this research has the potential to transform SpEd teachers training and, in turn, enhance educational outcomes for learners with diverse needs.

2. Theoretical and Conceptual Framework

The theoretical framework of this study is grounded in three foundational theories: Malcolm Knowles' *Adult Learning Theory*, Donald Schön's *Reflective Practice Theory*, and Lev Vygotsky's *Sociocultural Theory*. Knowles' *Adult Learning Theory* (andragogy) emphasizes that adults, such as SpEd teachers, are self-directed learners who draw on their life experiences and practical needs to guide their learning. This theory suggests that professional development (PD) programs for SpEd teachers should be designed to consider their previous knowledge and teaching experiences, enabling them to take ownership of their learning and apply it in real-world classroom settings. The principles of andragogy, such as readiness to learn and problem-centered learning, are essential in creating effective PD programs that cater to the specific needs of adult learners in SpEd contexts.

In addition to andragogy, Schön's **Reflective Practice Theory** supports the notion that teachers improve their

instructional practices through continuous self-reflection. Schön (1987) argued that reflection in action allows teachers to critically assess their practices, recognize challenges, and implement improvements. In the context of SpEd teachers, reflective practice is crucial in adapting teaching strategies to meet the diverse needs of students with disabilities. Teachers who engage in reflective practice are better equipped to evaluate their pedagogical approaches, identify areas for growth, and integrate new insights into their teaching. This aligns with the need for ongoing PD to help SpEd teachers refine their practices and enhance their teaching effectiveness.

Vygotsky's Sociocultural Theory further enriches the conceptual framework by emphasizing that learning is a social process shaped by interactions with more knowledgeable individuals. Vygotsky's concept of the Zone of Proximal Development (ZPD) underscores the importance of collaborative learning and peer support in professional development. In SpEd classrooms, teachers can benefit from social learning opportunities such as mentorship, collaborative workshops, and peer observations. These interactions allow teachers to expand their instructional strategies, adapt to diverse student needs, and improve their teaching through shared experiences. The combination of these theories provides a comprehensive lens through which the study explores the impact of PD on SpEd teachers' instructional practices, highlighting the importance of reflective, collaborative, and experience-based learning.

The integration of these three theories—Adult Learning, Reflective Practice, and Sociocultural Theory—provides an essential framework for understanding how professional development can directly enhance the instructional practices of SpEd teachers. By focusing on the individual needs and experiences of adult learners, promoting ongoing reflection on teaching practices, and fostering collaborative learning environments, this study aims to provide a comprehensive approach to teacher development. The importance of such an approach is amplified by the growing diversity in classrooms and the increasing demands for inclusive education. As SpEd teachers are tasked with addressing a wide range of student needs, effective professional development that incorporates these theoretical principles becomes not only a tool for teacher growth but also a critical factor in improving educational outcomes for students with special needs. This theoretical framework serves as the foundation for exploring how PD initiatives can lead to more effective, adaptive, and impactful teaching practices in SpEd classrooms, ultimately contributing to the advancement of inclusive education and better learning opportunities for all students.

2. Legal Frameworks

The legal framework underpinning this study includes key

Philippine laws that support inclusive education and the professional development of Special Education (SpEd) teachers. **Republic Act No. 10533, or the "Enhanced Basic Education Act of 2013,"** provides the foundation for the educational reforms in the Philippines, including a focus on inclusive education. The law mandates the implementation of improved curriculum standards, which necessitate teacher training and professional development programs aimed at enhancing educators' abilities to effectively teach all learners, including those with special needs. By emphasizing the need for high-quality education for all students, this law underscores the importance of continuous professional development for teachers to address the diverse learning requirements in SpEd classrooms.

Republic Act No. 11650, known as the "Inclusive Education Act," institutionalizes policies and services for learners with disabilities, ensuring that they have access to quality education in inclusive settings. This law establishes inclusive learning resource centers and mandates that schools, whether public or private, provide equitable access to education for students with disabilities. It calls for the professional development of teachers who work with these learners, recognizing the importance of specialized training to enhance teachers' instructional practices in SpEd classrooms. **Republic Act No. 10912, the "Continuing Professional Development (CPD) Act of 2016,"** also plays a critical role by mandating ongoing training for all licensed professionals, including teachers. This law emphasizes the need for SpEd teachers to participate in CPD programs that foster their continuous growth, ensuring that they remain equipped with up-to-date knowledge and skills to effectively teach students with special needs. Together, these legal frameworks reinforce the necessity of professional development in enhancing SpEd teachers' instructional practices, which is central to the study's focus.

Republic Act No. 11650, the Inclusive Education Act, and Republic Act No. 10533, the Enhanced Basic Education Act of 2013, directly address the educational needs of students with disabilities and the professional development of teachers.

Republic Act No. 11650 focuses on inclusive education by mandating schools to ensure equitable access to education for learners with disabilities. It emphasizes the establishment of inclusive learning resource centers and the need for specialized training for teachers to effectively support these students. Complementing this, Republic Act No. 10533 calls for a comprehensive enhancement of the basic education system, which includes the continuous professional development of educators to ensure they are equipped with the skills necessary to provide high-quality instruction for all students, including those with special

needs. Together, these laws provide an essential framework for ensuring that SpEd teachers receive the training and support necessary to adapt their instructional practices, improve student outcomes, and foster an inclusive learning environment.

3. Review of Related Literature

The importance of professional development (PD) for Special Education (SpEd) teachers has been emphasized in numerous studies as a key factor in improving instructional practices and student outcomes. Darling-Hammond et al. (2017) explored how professional development, when sustained and of high quality, can significantly enhance teacher effectiveness. Their research found that PD programs that integrate both content knowledge and effective classroom strategies have a substantial impact on teachers, especially those working with students with special needs. These programs not only improve teachers' abilities to manage diverse classrooms but also help them develop the skills needed to address the specific learning needs of students with disabilities. The findings underscore the critical need for specialized PD programs tailored for SpEd teachers to address the unique challenges they face.

Simonsen et al. (2020) examined targeted PD for SpEd teachers in areas such as behavior management, particularly through the implementation of Positive Behavioral Interventions and Supports (PBIS). Their study revealed that SpEd teachers who received training in PBIS demonstrated improved classroom management and were better able to create a positive learning environment for students with disabilities. This highlights the importance of including behavior management strategies in PD programs, as SpEd teachers often encounter unique challenges in handling classroom behaviors. Effective PD should therefore focus not only on instructional techniques but also on behavioral strategies that enhance the learning environment for students with special needs.

In a similar vein, Ducharme and Ducharme (2021) found that collaborative professional development models, where SpEd teachers work together to address instructional challenges and share best practices, have proven effective in improving teaching outcomes. The study highlighted how peer collaboration, facilitated through PD initiatives, led to stronger teacher practices and increased confidence. This collaborative approach is aligned with Lev Vygotsky's Sociocultural Theory, which emphasizes the importance of social learning and peer interaction in fostering professional growth. Collaborative PD initiatives for SpEd teachers can therefore enhance both individual teaching practices and collective problem-solving skills.

Furthermore, Wilson and Lubienski (2020) explored the impact of instructional coaching in SpEd settings. Their research demonstrated that regular coaching sessions and

personalized feedback are essential tools in improving SpEd teachers' instructional practices. The study highlighted how coaching provided SpEd teachers with the support and guidance needed to refine their teaching techniques, thereby increasing student engagement and improving educational outcomes. The emphasis on instructional coaching as part of PD aligns with the idea that ongoing, tailored support can be a highly effective method for enhancing teacher performance and student learning in SpEd classrooms.

The role of legal frameworks in supporting professional development initiatives for SpEd teachers has also been extensively studied. Wood and Simmons (2020) examined how laws such as the Individuals with Disabilities Education Act (IDEA) in the United States influence the PD needs of SpEd teachers. They found that such legal frameworks not only mandate ongoing training for teachers but also provide funding and resources to ensure the effectiveness of PD programs. Similarly, in the Philippines, laws such as Republic Act No. 11650, which promotes inclusive education, and Republic Act No. 10533, which enhances the basic education system, have established a legal foundation that supports the continuous development of SpEd teachers. These frameworks underscore the importance of having strong legal policies in place to ensure that SpEd teachers are equipped with the necessary skills and knowledge to meet the needs of students with disabilities.

McLeskey and Waldron (2020) further expanded on the relationship between inclusive education and professional development by highlighting the role of collaboration between SpEd and general education teachers. Their study emphasized that PD programs that promote inclusive teaching strategies lead to improved outcomes for students with disabilities. In the context of the Philippines, Republic Act No. 11650 plays a crucial role in supporting the professional growth of SpEd teachers by promoting inclusive education and ensuring equitable access to quality education for all learners, including those with disabilities. This legal framework, along with others such as Republic Act No. 10912 (the Continuing Professional Development Act), provides the necessary support for SpEd teachers to engage in ongoing learning and refine their instructional practices.

These studies collectively demonstrate the multifaceted nature of professional development for SpEd teachers. Effective PD programs should not only focus on pedagogical skills and content knowledge but also incorporate strategies for managing classroom behavior, foster collaborative learning environments, and align with legal frameworks that support inclusive education. The evidence suggests that tailored PD programs for SpEd teachers can lead to significant improvements in their

teaching practices, thereby enhancing the learning experiences and outcomes for students with disabilities. These findings provide a strong foundation for the ongoing development of SpEd teacher training programs that are responsive to both the teachers' needs and the legal and educational standards that govern special education.

4.Statement of the Problem

This study aimed to analyze the professional development undertakings concerning the extent of the teacher's instructional practices in handling Special Education (SpEd) classes in Pardo Elementary School, Cebu City during the school year 2024-2025 as basis for the proposed faculty professional development plan.

Specifically, it sought answers the following sub-problems:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 age;
 - 1.2 highest educational attainment;
 - 1.3 SpEd specialization;
 - 1.4 years in handling SpEd classes;
 - 1.5 numbers of training, learning, and development attended; and
 - 1.6 type of training/ learning and development attended?
2. What is the respondents' extent of instructional practices in handling SpEd classes as to:
 - 2.1 Structured practices; and
 - 2.2 Student-centered practices?
3. Is there a significant relationship between the demographic profile of the respondents and the extent of the instructional practices in handling SpEd classes?
4. When grouped by demographic profile, is there a significant difference in respondents' extent of instructional practices in handling SpEd classes?
5. Based on the findings, what faculty professional development plan can be developed?

4.1Statement of Hypothesis

The following null hypotheses were tested at the 0.05 level of significance.

Ho1: There is no significant relationship between the demographic profile of the respondents and the extent of the instructional practices in handling SpEd classes.

Ho2: When grouped by demographic profile, there is no significant difference in respondents' extent of instructional practices in handling SpEd classes.

4.2Research Design and Flow of the Study

This study employed a quantitative descriptive correlational research design to examine the relationship between professional development and the extent of Special Education (SpEd) teachers' instructional practices in handling SpEd classes. The design aimed to assess whether there was a connection between teachers' professional development and how they applied instructional strategies in SpEd classrooms. The approach helped quantify the level of professional development and instructional practices, establishing clear relationships that could guide future educational improvements.

To facilitate the study, the Input-Process-Output (IPO) Model was utilized. This model helped transform inputs into outputs while undergoing necessary processing. The model is frequently used in action research when an intervention or solution is required. The inputs in this study included the demographic profiles of the respondents, the extent of teachers' instructional practices in handling SpEd classes, the relationships between demographic profiles and instructional practices, and the development of a Faculty Professional Development Plan. The process involved securing necessary permissions, administering surveys, gathering and tabulating responses, and conducting appropriate statistical analyses. Ultimately, the output of this research was the development of a plan to enhance SpEd teachers' professional development and teaching capacity, fostering career growth.

Instruments and Data Collection

Data were collected using a researcher-made questionnaire, divided into two parts. The first part gathered information on the teachers' professional development demographic profile, including their qualifications and experiences. The second part focused on the extent of instructional practices, specifically assessing structural practices and student-centered strategies. A Likert scale was used to measure the frequency of instructional practices, with the scale ranging from "Never" (1) to "Always" (5). This allowed for a quantitative evaluation of how often SpEd teachers employed various instructional strategies in their classrooms.

The data gathering procedure followed a structured approach. Initially, a formal letter requesting permission to conduct the study was submitted to school administrators. Once consent was obtained, the researcher worked with school contacts to plan and implement the survey. Teachers were given the questionnaire to complete, ensuring accurate and confidential responses. After data collection, the responses were organized and analyzed

statistically to draw meaningful conclusions.

Statistical Treatment and Scoring Procedure

The gathered data were analyzed using several statistical tools to explore the relationships and differences in instructional practices. The frequency method was used to count the responses regarding teachers' professional development. Percentage analysis was employed to calculate the proportion of teachers in each category of professional development. The weighted mean helped assess the extent of instructional practices in SpEd classrooms. To determine if there was a significant relationship between professional development and instructional practices, the Chi-square test of independence was used. Finally, ANOVA (Analysis of Variance) was employed to identify differences in instructional practices based on the demographic profiles of the teachers.

The study employed a Likert-Type scale to assess the extent of instructional practices, using a scoring procedure to categorize responses. The scale ranged from 1 to 5, where 5 represented "Always," meaning the teacher consistently applied instructional practices, and 1 represented "Never," indicating that the teacher never utilized the practice. The scale also included intermediate categories such as "Often," "Sometimes," "Rarely," and "Never." This scoring method helped classify teachers' responses, providing a clear indication of the frequency with which specific instructional strategies were used.

This study's methodological approach was designed to provide a comprehensive understanding of how professional development influenced SpEd teachers' instructional practices. By using a detailed research design, structured data collection methods, and robust statistical analysis, the study aimed to generate actionable insights that could inform improvements in teacher training and professional development programs. The output, in the form of a Faculty Professional Development Plan, served as a tool for enhancing the instructional practices of SpEd teachers and fostering career growth within the educational community.

4.3 Ethical Considerations and Data Privacy:

The survey was administered, informed consent was obtained from all participants, and prior approvals were secured from the relevant institutions. To ensure confidentiality and anonymity, the data were collected anonymously and encrypted. Voluntary participation was emphasized, ensuring no coercion was involved. Furthermore, in accordance with the Data Privacy Act of 2012, all data were securely stored in password-protected files, and no personal information was shared with third parties. These measures helped maintain the privacy of all participants throughout the research process.

5. Research Environment

This study was conducted at Cebu Technological University (CTU) Main Campus, located in M.J. Cuenco Ave. Cor. R. Palma St., Cebu City. Established in 1911, CTU is one of the oldest vocational schools in the Philippines, initially focused on enhancing students' technical skills. In 2009, the institution was elevated to university status through Republic Act No. 9744, becoming Cebu Technological University. Recognized for its excellence, CTU is ranked as one of the top universities in the Philippines and continues to gain international recognition. The College of Education at CTU Main Campus is particularly renowned for producing top performers in the Licensure Exam for Professional Teachers.



PARDO ELEMENTARY SCHOOL

The respondents of this study were the Special Education teachers handling elementary students in Pardo Elementary School. The selected teachers were expected as the research respondents from the researchers from Cebu Technological University Main Campus because they are the main focus of the study in which the researchers have determined the

relation of professional development to the extent of the teacher's instructional practices in handling SpEd classes. To ensure the validity and reliability of the samples, a complete enumeration was utilized.

Research Environment and Respondents

The study was conducted at Pardo Elementary School in Cebu City, Philippines, a school that offered both regular elementary education and special education classes. The school's history dates back to 1914, and today it serves a student population of 4,830 children. Managed by Principal Elsie M. Colo, the school included a diverse range of programs such as Special Needs Education (SNed), Alternative Learning System (ALS), Arabic Language and Islamic Values Education (ALIVE), and the Special Science Elementary Curriculum. This setting provided a diverse environment for exploring how professional development impacted SpEd instructional practices.

The respondents of this study were the Special Education teachers at Pardo Elementary School. The selected teachers were deemed essential for the study as they directly influenced the extent of instructional practices within SpEd classrooms. To ensure the validity and reliability of the sample, a complete enumeration sampling technique was applied, meaning all SpEd teachers at the school were invited to participate. This method provided comprehensive data reflective of the entire teacher population.

6.Presentation, Analysis, and Interpretation of Data

This chapter presents the gathered data regarding the professional development undertakings concerning the extent of the teacher's instructional practices in handling SpEd classes in DepEd Cebu during the school year 2024-2025 as the basis for the faculty professional development plan.

Table 1: Distribution of the Respondents

| Sampled Respondents | n | % |
|---------------------|-----------|---------------|
| SPED Teachers | 10 | 100.00 |
| TOTAL | 10 | 100.00 |

Table 2: Age of the Respondents

| | | Frequency | Percentage |
|-------------------|---------|-----------|------------|
| A. Age [in years] | | | |
| range | 21 - 30 | 1 | 10 |
| | 31 - 40 | 2 | 20 |
| | 41 - 50 | 5 | 50 |

| | | | |
|--|--------------|--------------------|----------------------|
| | More than 50 | 2 | 20 |
| | | Mean: 43.40 | St. Dev: 8.72 |

Table 2 presents the demographic profile of the teacher respondents, specifically focusing on their age distribution. Understanding the age of Special Education (SpEd) teachers is essential, as it can provide insights into their teaching experience, knowledge base, and potential impact on their instructional practices.

The following table summarizes the age distribution of the 10 SpEd teachers involved in the study, highlighting the diversity in age and its possible influence on their teaching approaches and professional development. The majority of the respondents were between 41-50 years old, comprising 50% of the total sample. Two respondents (20%) were in the 31-40 and 51+ age groups, while one respondent (10%) was aged 21-30.

Older teachers tend to have a richer knowledge base developed through years of experience, which can enhance their teaching effectiveness. However, they must also continually engage in professional development to stay updated on modern pedagogical methods for optimal teaching and learning outcomes (Esmail et al., 2018). This underscores the relevance of age in shaping instructional practices among SpEd teachers.

Table 3: Highest Educational Attainment of the Respondents

| Educational Attainment | Frequency | Percentage |
|---------------------------------|-----------|------------|
| Master of Arts in Education | 9 | 90.00% |
| Doctor in Development Education | 1 | 10.00% |
| Total | 10 | 100% |

Table 3 shows that 90% of the respondents hold a Master's degree in Education, while 10% have a Doctoral degree in Development Education.

Research indicates that students taught by highly educated teachers are more likely to achieve higher levels of education (Lee & Lee, 2020). Teachers with advanced degrees, particularly at the master's level, are also often rewarded with wage increases, highlighting the importance of higher qualifications. These educational credentials are

crucial for enhancing teaching effectiveness and student development, especially in specialized fields like Special Education.

Table 4: SpEd Specialization of Teacher Respondents

| SpEd Specialization | Frequency | Percentage |
|-----------------------|-----------|------------|
| Learning Disabilities | 2 | 20.00% |
| Multiple Disabilities | 2 | 20.00% |
| ADHD | 1 | 10.00% |
| ASD | 1 | 10.00% |
| Hearing Impairments | 1 | 10.00% |
| No Response | 3 | 30.00% |

Table 4 presents the SpEd specialization of the 10 teacher respondents. Among them, 30% did not specify a particular specialization, while 20% each specialized in Learning Disabilities and Multiple Disabilities. The remaining 30% were equally distributed across ADHD, ASD, and Hearing Impairments, with one respondent in each area.

Teacher education is crucial for fostering an inclusive and equitable educational environment, enabling teachers to effectively address the diverse needs of students (De Angeles, 2021). The specialization of SpEd teachers plays a significant role in enhancing their instructional practices, as it allows them to apply targeted strategies that best support their students' unique needs.

Table 5: Number of Years in Handling SpEd Classes of Teacher Respondents

| Years in Handling SpEd Classes | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Less than a year | 0 | 0.00% |
| 1 - 3 years | 5 | 50.00% |
| 4 - 6 years | 3 | 30.00% |
| 7 - 9 years | 0 | 0.00% |
| 10 years and more | 2 | 20.00% |
| Mean | | 6.90 |
| Standard Deviation | | 9.50 |

Table 5 shows the distribution of years of experience in handling SpEd classes among the respondents. Half of the respondents (50%) have 1-3 years of experience, while

30% have 4-6 years, and 20% have 10 or more years of experience. No respondents reported having less than a year or 7-9 years of experience.

Research by Podolsky and Darling-Hammond (2019) highlights that teaching experience positively correlates with student achievement, with experienced teachers often seeing better student outcomes. As teachers gain experience, particularly in supportive and collegial environments, their teaching efficacy improves, enhancing their ability to meet students' needs in SpEd classroom

Table 6: Number of Training, Learning, and Development Attended of the Respondents

| Number of Training, Learning, and Development Attended | Frequency | Percentage |
|--|-----------|------------|
| No SpEd training at all | 5 | 50.00% |
| 1 - 8 hours | 0 | 0.00% |
| 9 - 16 hours | 0 | 0.00% |
| 17 - 24 hours | 0 | 0.00% |
| More than 24 hours | 5 | 50.00% |

Table 6 shows the number of training, learning, and development programs attended by the teacher-respondents in SpEd. Out of 10 respondents, 50% have attended more than 24 hours of training, while the remaining 50% have not attended any SpEd training at all. This split indicates a significant gap in professional development opportunities for teachers, with half of the respondents lacking the specialized training necessary for effective SpEd instruction. According to Istiarsyah et al. (2019), training in inclusive education methods improves teachers' confidence and efficacy in engaging with special needs students, ultimately contributing to the success of inclusive education. Therefore, providing regular and comprehensive SpEd training is essential for enhancing instructional practices and supporting teachers in meeting the diverse needs of their students.

Table 7: Training, Learning, and Development Needs of the Respondents

| Training, Learning, and Development Needs | Frequency | Rank |
|---|-----------|------|
| Adapting Curriculum for SpEd Learners | 5 | 1 |
| Autism | 4 | 2 |
| Assistive Technologies | 3 | 3 |

| Training, Learning, and Development Needs | Frequency | Rank |
|---|-----------|------|
| Auditory Process Disorders | 3 | 3 |
| Cognitive Disorder | 3 | 3 |
| Anxiety Disorder | 1 | 5 |
| Behavioral Problems | 1 | 5 |
| Others | 2 | 4 |

Table 7 presents the training, learning, and development needs of the teacher-respondents. The most frequently identified need is Adapting Curriculum for SpEd Learners, with 5 responses, ranking it first. This is followed by Autism, which received 4 responses, ranking second. Other areas identified as important include Assistive Technologies, Auditory Process Disorders, and Cognitive Disorder, all of which received 3 responses each, ranking third. Other topics were mentioned by 2 respondents, ranking fourth, while Anxiety Disorder and Behavioral Problems received only 1 response each, ranking fifth. These results align with the findings of Crispel & Kasperski (2021), who noted that a major challenge in inclusive education is the conflict between demanding academic standards and the specialized needs of students. Many teachers seek additional training to better address these challenges. Furthermore, Pit-ten Cate et al. (2018) emphasize the importance of providing teachers with the necessary training to accommodate diverse learners effectively. Prioritizing these training needs will help enhance teachers' instructional practices and their ability to meet the varied educational needs of students in SpEd classrooms.

Table 8: Perceived Structured Practices in Handling SpEd Classes

| # | Mean | StDev | Description |
|----|------|-------|---|
| 1. | 4.50 | 0.71 | Always: Every day, I go through my learners' exercise books or assignments. |
| 2. | 4.00 | 1.05 | Often: I assign several work tasks to SpEd learners who are having difficulty learning. |
| 3. | 3.80 | 0.92 | Often: I assign alternative work tasks to SpEd learners who progress more quickly. |
| 4. | 3.70 | 0.68 | Often: I provide the SpEd learners with a summary of recently studied material. |

| # | Mean | StDev | Description |
|------------------|-------------|-------------|---|
| 5. | 4.20 | 0.79 | Always: I presented new information that is essential for SpEd learners in the improvement of life skills. |
| 6. | 3.90 | 0.88 | Often: I instructed SpEd learners to perform comparable activities until they are confident to grasp the learning materials. |
| 7. | 4.10 | 0.57 | Often: I assessed SpEd learners through summative procedures. |
| 8. | 4.30 | 0.82 | Always: I know how to identify learners with learning problems. |
| 9. | 3.90 | 1.10 | Often: I am familiar with methods of how to support literacy development in reading, writing, or mathematics for SpEd learners. |
| 10. | 4.00 | 0.94 | Often: I know how to develop individualized materials of SpEd learners for educational support. |
| Aggregate | 4.04 | 0.85 | Often |

Range: 1.00-1.79 = Never; 1.80-2.59 = Rarely; 2.60-3.39 = Sometimes; 3.40-4.19 = Often; 4.20-5.00 = Always

Table 9: Perceived Learner-Centered Practices in Handling SpEd Classes

| # | Mean | StDev | Description |
|----|------|-------|---|
| 1. | 4.40 | 0.84 | Always: Keeping in my view allowing time for SpEd learners to complete their projects according to their educational needs. |
| 2. | 4.40 | 0.84 | Always: Keeping in my view the learners' pace to work on their projects according to their special needs. |
| 3. | 4.10 | 0.88 | Often: In the classroom, SpEd learners collaborate in small |

| # | Mean | StDev | Description |
|------------------|-------------|-------------|---|
| | | | groups to complete a task. |
| 4. | 3.70 | 0.68 | Often: Engaging in any school activities, where each SpEd learner is responsible for a key part of the assignment and teaches the others what they learned. |
| 5. | 4.10 | 0.57 | Often: Encourage SpEd learners to build upon their own interests to apply their learning to a school task. |
| Aggregate | 4.14 | 0.76 | Often |

Range: 1.00-1.79 = Never; 1.80-2.59 = Rarely; 2.60-3.39 = Sometimes; 3.40-4.19 = Often; 4.20-5.00 = Always

Table 9 shows the extent of learner-centered practices in handling SpEd classes, with an aggregated mean of **4.14**, which is categorized as "Often." The highest-rated indicators, both with a mean of **4.40**, emphasize allowing SpEd learners time to complete their projects and ensuring that the pace of the projects aligns with their special needs, both of which were rated as "Always." Other learner-centered practices, such as encouraging collaboration in small groups, promoting students' social engagement, and allowing learners to apply their interests to school tasks, were rated "Often," with means ranging from **3.70 to 4.10**. These results align with Gage et al. (2018), who emphasize the importance of classroom management skills in helping students succeed. Ensuring that SpEd teachers focus on the total development of their students is critical for fostering a positive learning environment. Furthermore, Klang et al. (2019) highlight the significance of social engagement for SpEd learners and suggest that more research is needed to understand how these practices could be applied in mainstream settings to enhance inclusive education.

Table 10: Relationship Between Respondents' Demographic Profile and the Extent of Instructional Practices as to Structured Practices (alpha = 0.05)

| | Chi-Square | df | Critical Value | Significance | Result |
|-----------------------------|------------|----|----------------|-----------------|-------------|
| Structured Practices | | | | | |
| Age | 2.100 | 6 | 12.592 | Not significant | Ho accepted |

| | Chi-Square | df | Critical Value | Significance | Result |
|--|------------|----|----------------|-----------------|-------------|
| Highest Educational Attainment | 1.464 | 4 | 9.488 | Not significant | Ho accepted |
| SpEd Specialization | 8.083 | 10 | 18.307 | Not significant | Ho accepted |
| Years in Handling SpEd Classes | 7.600 | 4 | 9.488 | Not significant | Ho accepted |
| Number of Training, Learning, and Development Attended | 3.800 | 2 | 5.991 | Not significant | Ho accepted |

Table 10 presents the findings of the test of significance for the relationship between the respondents' demographic profiles and the extent of instructional practices in structured practices. Using an alpha level of 0.05, the results indicate that there is no significant relationship between structured instructional practices and the respondents' age, highest educational attainment, SpEd specialization, years of experience handling SpEd classes, or the number of training, learning, and development programs attended. In each case, the calculated chi-square values are below the critical values, resulting in the acceptance of the null hypothesis, which asserts that these demographic factors do not significantly impact the extent of structured instructional practices.

These findings suggest that the teachers' demographic characteristics do not hinder their ability to implement structured practices in SpEd classrooms. However, as Knight et al. (2019) emphasize, enhancing educational outcomes for learners with special needs requires the use of evidence-based strategies and interventions. While demographic factors may not influence structured practices, professional development and the use of effective teaching methods are critical for improving instructional effectiveness in special education settings.

Table 11: Relationship Between Respondents' Demographic Profile and the Extent of Instructional Practices as to Student-Centered Practices (alpha = 0.05)

| Practices | Chi-Square | df | Critical Value | Significance | Result |
|-----------------------------------|------------|----|----------------|--------------|--------|
| Student-Centered Practices | | | | | |

| Practices | Chi-Square | df | Critical Value | Significance | Result |
|--|------------|----|----------------|-----------------|-------------|
| Age | 3.333 | 6 | 12.592 | Not significant | Ho accepted |
| Highest Educational Attainment | 2.381 | 4 | 9.488 | Not significant | Ho accepted |
| SpEd Specialization | 7.222 | 10 | 18.307 | Not significant | Ho accepted |
| Years in Handling SpEd Classes | 8.000 | 4 | 9.488 | Not significant | Ho accepted |
| Number of Training, Learning, and Development Attended | 2.667 | 2 | 5.991 | Not significant | Ho accepted |

Table 11 displays the results of the test of significance for the relationship between the respondents' demographic profiles and the extent of student-centered practices. With an alpha level of 0.05, the findings indicate that there is no significant relationship between student-centered practices and the respondents' age, highest educational attainment, SpEd specialization, years of experience handling SpEd classes, or the number of training, learning, and development programs attended.

In all cases, the calculated chi-square values are below the critical values, leading to the acceptance of the null hypothesis. This suggests that these demographic characteristics do not significantly influence SpEd teachers' use of student-centered instructional approaches.

These results imply that the teachers' demographic characteristics do not hinder their ability to apply student-centered practices in SpEd classrooms. However, as Knight et al. (2019) suggest, to further strengthen their instructional practices, SpEd teachers should focus on identifying key criteria that influence their teaching decisions, particularly those related to student needs and professional judgment. Ensuring that instructional decisions are informed by students' unique needs can enhance the effectiveness of student-centered approaches and improve learning outcomes for SpEd learner.

Table 12: Relationship Between Respondents' Demographic Profile and the Extent of Instructional Practices (alpha = 0.05)

| Practices | Chi-Square | df | Critical Value | Significance | Result |
|--|------------|----|----------------|-----------------|-------------|
| Extent of Instructional Practices | | | | | |
| Age | 3.433 | 6 | 12.592 | Not significant | Ho accepted |
| Highest Educational Attainment | 2.000 | 4 | 9.488 | Not significant | Ho accepted |
| SpEd Specialization | 6.278 | 10 | 18.307 | Not significant | Ho accepted |
| Years in Handling SpEd Classes | 5.378 | 4 | 9.488 | Not significant | Ho accepted |
| Number of Training, Learning, and Development Attended | 4.133 | 2 | 5.991 | Not significant | Ho accepted |

Table 12 presents the findings of the test of significance for the relationship between respondents' demographic profiles and the extent of instructional practices. Using an alpha level of 0.05, the results indicate that there is no significant relationship between respondents' demographic profiles (such as age, highest educational attainment, SpEd specialization, years of experience handling SpEd classes, and the number of training, learning, and development programs attended) and the extent of their instructional activities. The calculated chi-square values are all below the critical values, leading to the acceptance of the null hypothesis.

These results suggest that the demographic profiles of teachers handling SpEd classes do not hinder their capacity to apply effective instructional practices. While the findings show no significant relationship between professional development and the extent of instructional practices, the study by Bilal et al. (2019) underscores the importance of professional development in improving teacher effectiveness and student success. Professional development opportunities have been shown to enhance teachers' instructional practices, which, in turn, can positively impact the learning outcomes of students with special needs.

Table 13: Significant Difference in the Respondents' Extent of Instructional Practices When Grouped by Their Profile (alpha = 0.05)

| Grouped By | F-Value | P-Value | Significance | Result |
|--|---------|---------|-----------------|-------------|
| Extent of Instructional Practices When Grouped By | | | | |
| Age | 0.21 | 0.939 | Not significant | Ho accepted |
| Highest Educational Attainment | 0.39 | 0.691 | Not significant | Ho accepted |
| Years in Handling SpEd Classes | 1.54 | 0.449 | Not significant | Ho accepted |
| Number of Training, Learning, Development Attended | 4.89 | 0.058 | Not significant | Ho accepted |

Table 13 presents the results of the test of significance for the difference in the extent of instructional practices among respondents grouped by their demographic profile. Using an alpha level of 0.05, the results indicate that there is no significant difference in the extent of instructional practices based on age, highest educational attainment, years of experience handling SpEd classes, and the number of Training, Learning, and Development Programs attended. The p-values for these variables were 0.939, 0.691, 0.449, and 0.058, respectively, all greater than 0.05. Therefore, the null hypothesis is not rejected.

This suggests that factors such as age, highest educational attainment, years of experience, and the number of training and development programs attended by teachers do not necessarily influence the instructional practices they employ when handling SpEd classes. However, research by Minghui et al. (2020) emphasizes that years of experience, as well as monthly wages, are significant predictors of teacher effectiveness. This implies that while the demographic profile of teachers may not show a marked impact on instructional practices, other factors, including experience and financial capacity, could still play a role in shaping their teaching practices.

Findings

The findings of the study revealed that most respondents were aged between 41-50 years, with 50% holding a master's degree. Additionally, the teachers had between 3 to 6 years of experience in handling Special Education (SpEd) classes and had attended over 24 hours of training. The study found that the respondents' instructional practices in both Structured Practices and Student-Centered Practices were often observed, with aggregate means of 4.04 and 4.14, respectively. Furthermore, the Test of Significance revealed no significant relationship between the respondents' demographic profiles—such as age,

highest educational attainment, years of experience, and training attended—and their instructional practices. Similarly, no significant differences were found in the extent of instructional practices when grouped by these demographic factors.

Recommendations

Based on the study's findings, the following recommendations are made to enhance the professional development and instructional practices of SpEd teachers:

- 1. Targeted Professional Development:** Implement focused training on key SpEd areas such as curriculum adaptation and assistive technologies to ensure teachers are equipped with effective strategies.
- 2. Collaborative Learning Communities:** Establish peer mentoring and professional learning communities (PLCs) for continuous sharing of best practices and collaborative growth.
- 3. Data-Driven Feedback Systems:** Introduce regular, data-based evaluations of teaching practices, linking feedback to professional development to personalize support.
- 4. Differentiated Instruction Training:** Provide teachers with skills in differentiated instruction and individualized learning plans to better meet diverse student needs.
- 5. Assistive Technology Integration:** Offer ongoing training in assistive technologies, enabling teachers to incorporate tools that enhance learning for all students.

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Author contributions

In the study titled Assessing the Effectiveness of Professional Development and Instructional practices among Special Education Teachers of Pardo Elementary School, **Juvilyn R. Geromo** led the conceptualization, design of methodology, and overall management of the research, ensuring the study aligned with its objectives.

Regina E. Sitoy played a key role in the literature review, survey development, and data collection, contributing to a thorough understanding of the professional development needs of SpEd teachers.

Princess F. Patindol was instrumental in managing data, conducting analysis, and interpreting the results, particularly in evaluating the effectiveness of professional development programs on teaching practices. **Merry Joy L. Tek-ing** contributed to the statistical analysis and provided critical insights into the discussion, ensuring accurate representation of the findings.

Marjorie N. Amit contributed significantly to the development of the research framework and collaborated in drafting and revising the manuscript, especially in relation to the study's practical implications. **Hedinia D. Castro** supported the survey design, validated the data, and helped interpret the results, strengthening the overall conclusions drawn from the study.

Together, the authors collectively drafted the manuscript, conducted interviews, and finalized the document, ensuring a comprehensive analysis of the effectiveness of professional development programs for SpEd teachers.

Conflicts of interest

The authors declare no conflicts of interest.

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