

Special Needs Education Teacher Workforce in Parañaque City: Implications for Inclusive Education Planning

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ABSTRACT: This study examined the Special Needs Education (SNED) teacher workforce in the Schools Division Office of Parañaque City and its consequences for inclusive education planning. Employing a descriptive documentary research approach and analyzing official records, the study assessed workforce capacity, deployment, and support for learners with special needs. Results indicated that 1,729 learners with special needs were served by only 28 permanent SNED teachers and 54 general education teachers in inclusive classes. However, 2,700 teachers completed SNED-related professional development; only a small number held permanent SNED positions. This evidence shows that while professional development has enhanced teacher capacity, the limited availability of specialized permanent positions is still a significant obstacle to effective inclusive education implementation. The proposed Special Education Teacher Workforce Planning Framework (SETWPF) is presented as a potential model for workforce mapping, development, and strategic choices.

KEYWORDS: Inclusive Education; Special Needs Education; Teacher Workforce; Workforce Planning; Documentary Research; Philippines

BACKGROUND OF THE STUDY

Inclusive education affirms the right of learners with special needs to receive quality education in mainstream settings. International frameworks such as the Convention on the Rights of Persons with Disabilities and Sustainable Development Goal 4 require education systems to remove barriers, expand participation, and provide appropriate support for learners with disabilities. UNESCO likewise emphasizes that inclusion depends on system capacity, particularly the availability of qualified teachers and enabling school conditions (Tang & UNESCO, 2017; UNESCO, 2020)

In the Philippines, inclusive education has been strengthened through national legislation and Department of Education initiatives, but implementation remains uneven because of persistent constraints in staffing, infrastructure, and instructional resources. These problems are reflected in the Schools Division Office of Parañaque City, where reports indicate growing requirements for specialized intervention, limited plantilla positions for SNED specialists, and a large number of teachers with SNED-related training. This study therefore examines the relationship between learner need and the available SNED workforce to inform inclusive education planning.

This study analyzes data from the Schools Division Office to examine the relationship between the number of students with special needs and SNED professionals, their deployment, and the consequences for inclusive education planning. Statement of the Problem
This study attempts to answer the following questions:

- What is the current makeup of Parañaque City's workforce of special education teachers?
- What is the current special education teacher-to-student ratio?
- How well does the current SNED workforce address the educational needs of students with disabilities?
- How does Parañaque City's current SNED workforce affect inclusive education planning?
- What policy and workforce development suggestions might be made to improve inclusive education?

REVIEW OF RELATED LITERATURE

Inclusive Education in Global and Philippine Contexts

Inclusive education is widely recognized as a human right and a core condition for just access to high-quality learning for all learners, including those with disabilities (ERIC, 1994; United Nations, 2006) International policy systems, especially the United Nations Convention on the Rights of Persons with Disabilities and Sustainable Development Goal 4, require education systems to remove barriers, expand participation, and ensure that learners with disabilities receive appropriate support in mainstream settings (2015-2016), 2015; United Nations, 2006) UNESCO's guidance likewise emphasizes that inclusion is not achieved through policy

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declaration alone but through system capacity, particularly the availability of qualified teachers and enabling school conditions (Tang) & UNESCO, 2017; UNESCO, 2020) Recent global monitoring continues to identify teacher supply, teacher preparation, and unequal resource dissemination as key determinants of inclusive education implementation (UNESCO, 2020; OECD, 2018). In the Philippines, inclusive education has been strengthened through national legislation and Department of Education initiatives intended to improve access and participation for learners with disabilities (Republic of the Philippines, 2022; Department of Education, 2017). However, Philippine studies and systematic reviews show that implementation remains uneven across schools and divisions because of persistent constraints in staffing, infrastructure, and instructional resources (Inciong & Quijano, 2004; Kit et al., 2025; Tagyamon et al., 2025). Although policy support has expanded over time, local school systems continue to face practical difficulties in translating inclusive principles into sustained classroom practice (Galleto & Bureros, 2017; Jardinez & Natividad, 2024)

Role of SNED Teachers in Inclusion

Special Education (SNED) teachers play a central role in operationalizing inclusive education. Their responsibilities go past direct instruction and include assessment, the development of individualized education programs, curriculum adaptation, behavior support, consultation with general education teachers, as well as collaboration with families and allied professionals (Florian & Black-Hawkins, 2010; Forlin, 2015) As inclusion expands, SNED teachers increasingly serve as instructional leaders and school-based support personnel rather than functioning solely as self-contained classroom teachers (Ainscow, 2020; UNESCO, 2020) Their knowledge is key for making sure that learners with disabilities receive both individualized support and meaningful participation in general education settings (OECD, 2018).

Empirical studies in the Philippines similarly indicate that teachers' preparedness, professional development, and joint support are central to inclusive practice (Cabello et al., 2025; Kilag et al., 2025; Macabenta et al., 2023). Macabenta et al. (2023) highlight that sustained access to professional development programs contributes not only to teachers' confidence but also to their skill in adapting curricula and instructional strategies for different learners. Cabello et al. (2025) and Kilag et al. (2025) further stress the significance of collaborative teaching models and institutional support mechanisms in promoting successful inclusive education. However, when the number of qualified teachers is limited, schools commonly rely on general education teachers to deliver specialized support despite insufficient training, which can weaken the consistency and quality of services provided to learners with disabilities. Local studies also report that a lack of systematized mentoring and resource-sharing among teachers frequently worsens challenges, rendering sustained inclusive practice difficult where workforce shortages persist. These findings stress that while professional development initiatives and joint support systems are valuable, they cannot fully offset the adverse effects of an insufficiently staffed and inadequately prepared SNED teacher workforce in Philippine schools.

Global SNED Teacher Shortage

Teacher shortage is one of the major barriers to inclusive SNED education worldwide. International reports note that many education systems experience difficulty recruiting and retaining qualified teachers, particularly in specialized fields where workloads are high and support structures are limited (OECD, 2018; UNESCO, 2020) Shortages of teachers can delay identification of learning needs, reduce the quality of individualized instruction, and limit the ability of schools to implement evidence-based inclusive practices (Tang) & UNESCO, 2017; UNESCO, 2020) These shortages are not limited to low-income settings; they are also evident in higher-income education systems, indicating that the challenge is global rather than context-specific (OECD, 2018).

The wider literature also highlights that staffing shortages interact with other structural conditions such as administrative workload, limited access to professional development, and inadequate institutional support. As a result, the sustainability of inclusive education depends not only on policy commitment but also on teacher workforce planning and retention strategies.

SNED Teacher Supply in the Philippines

Philippine literature consistently identifies the shortage of qualified SNED teachers as a central obstacle to effective inclusive education. Although many general education teachers have received short-term SNED-related training, relatively few hold formal special education qualifications or occupy permanent plantilla positions. This pattern creates a mismatch between learner needs and workforce capacity, especially in divisions with growing enrolments of learners with disabilities.

Systematic reviews of Philippine special education further show that implementation barriers comprise limited funding, weak infrastructure, insufficient teacher training, and inconsistent policy enforcement (Kilag et al., 2025; Cabello et al., 2025). These results show that workforce adequacy should be examined not only in terms of professional development participation but also in terms of permanent staffing, deployment, and functional capacity to support inclusive provision (Inciong & Quijano, 2004; Jardinez & Natividad, 2024).

Implications of SNED Shortages

The effects of SNED teacher shortages go beyond staffing numbers. Limited specialist supply increases teacher workload, restricts opportunities for individualized instruction, and places additional demands on general education teachers who may not have

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specialized preparation (Cruz, 2024; Macabenta et al., 2023) Shortages may also weaken collaboration with families and multidisciplinary professionals, which constitute essential elements of effective inclusion (Forlin, 2015; UNESCO, 2020) In situations where general education teachers are expected to support learners with disabilities without sufficient training, the quality and continuity of educational support may be compromised (Galleto & Bureros, 2017; Cabello et al., 2025).

Recent Philippine studies point out the importance of sustained professional development, collaborative teaching models, and institutional support mechanisms to confront these problems. However, training alone is not sufficient if schools lack enough permanent SNED personnel to coordinate, mentor, and sustain inclusive practices. Accordingly, teacher workforce planning must address both capacity building and staffing adequacy.

RESEARCH GAP

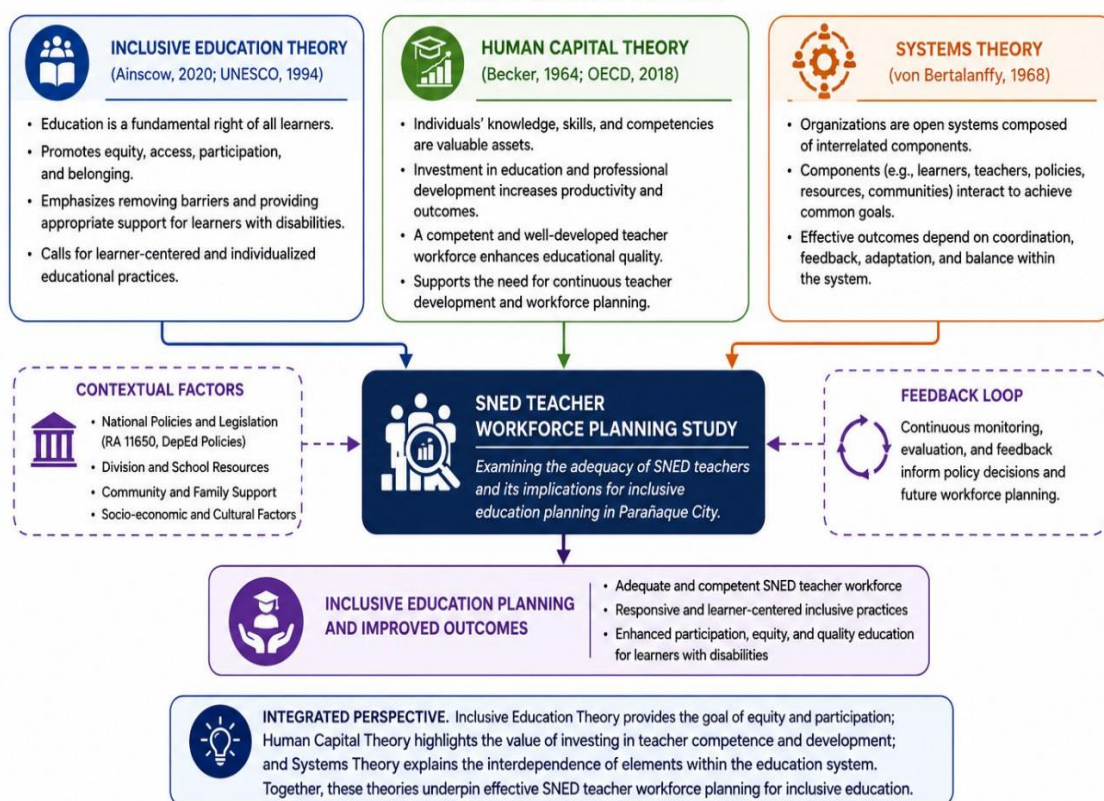
Although research on inclusive education has expanded considerably, most studies focus on teachers' perspectives, instructional methods, implementation challenges, professional development, and policy analysis. While these studies offer valuable insights into teachers' experiences and the implementation of inclusive education, they provide limited data regarding the sufficiency of Special Needs Education (SNED) teachers to meet the increasing demand for specialist services.

Most workforce studies in the Philippines are conducted at the national or regional level and rely on aggregate statistics, which may obscure significant differences in staffing among individual school divisions. Few studies have utilized official records to examine the alignment of learner enrollment, specialist teacher placement, workforce capacity, and staffing levels at the local level. Consequently, a substantial gap remains in the evidence needed to support data-driven workforce planning, position allocation, and systematic human resource development for inclusive education.

To date, no published study has comprehensively examined the SNED teacher workforce in the Schools Division Office of Parañaque City using official data and a planning framework crafted for inclusive education. This study addresses this gap by providing local evidence on workforce adequacy, studying the relationship between learner needs and specialist teacher supply, and introducing the Special Education Teacher Workforce Planning Framework (SETWPF) as an evidence-based model for workforce planning. In addition to describing the current workforce, the study offers an effective framework to inform policy development, staffing, teacher education planning, and long-term workforce development in Parañaque City and other Philippine school divisions engaged in inclusive education.

FIGURE 1. THEORETICAL FRAMEWORK

An Integrated Theoretical Foundation for the SNED Teacher Workforce Planning Study and Inclusive Education Outcomes



THEORETICAL FRAMEWORK

This study is grounded in Inclusive Education Theory, Human Capital Theory, and Systems Theory, which together offer a thorough framework for studying the Special Needs Education (SNED) teacher workforce and its consequences for inclusive education planning. Inclusive Education Theory asserts that all learners, including those with disabilities, are entitled to high-quality education in integrated settings, with successful implementation contingent on the presence of qualified special education teachers. Human Capital Theory, as articulated by Gary Becker, positions teachers as essential assets whose knowledge and professional development are necessary for enhanced learning outcomes. Investments in teacher preparation, ongoing professional development, and retention are central to strengthening workforce capacity and the quality of inclusive education. Systems Theory, developed by Ludwig von Bertalanffy, conceptualizes education as an interconnected system in which changes in any component, such as the supply of SNED teachers, affect the overall effectiveness of inclusive education.

This study operationalizes these conceptual perspectives through the Special Education Teacher Workforce Planning Framework (SETWPF), an original conceptual model synthesized from the three theories and supported by established workforce planning principles. The SETWPF characterizes workforce planning as a cyclical, interconnected process comprising five phases: (1) Learner Needs Assessment, (2) Workforce Mapping, (3) Workforce Capacity Analysis, (4) Strategic Workforce Development, and (5) Improved Inclusive Education Outcomes. This framework merges learner demand, teacher supply, institutional capacity, and policy considerations within a continuous planning and feedback cycle, enabling responsive and evidence-based workforce decisions.

The SETWPF functions as both the conceptual foundation of this study and a practical planning tool. Through integrating Inclusive Education Theory, Human Capital Theory, and Systems Theory, the framework enables a holistic approach to strengthening the SNED workforce. This model delivers an analytical framework for research and a tactical guide for policy and workforce development, directly addressing the difficulties of inclusive education planning in Parañaque City.

This study is anchored in Inclusive Education Theory, Human Capital Theory, and Systems Theory, which jointly afford a comprehensive lens for examining the Special Needs Education (SNED) teacher workforce and its consequences for inclusive education planning. Inclusive Education Theory serves as the primary foundation of the study. It stresses that all learners, regardless of disability or educational needs, have the right to equitable access to high-quality education within integrated learning environments. The successful implementation of inclusive education depends on the availability of qualified and competent special education teachers who can provide appropriate instructional support and accommodations.

Human Capital Theory, proposed by Gary Becker, complements this perspective by viewing teachers as valuable human resources whose knowledge, skills, and professional competencies contribute to enhanced learning outcomes. Investments in teacher preparation, professional development, and retention enhance workforce capacity, eventually strengthening the quality of inclusive education. Systems Theory, developed by Ludwig von Bertalanffy, explains that education functions as an interconnected system in which learners' needs, the teacher workforce, educational institutions, and policy environments continuously influence one another. Changes in one component, such as the supply of qualified SNED teachers, affect the effectiveness of the entire inclusive education system. Consequently, workforce planning needs cooperative efforts among educational institutions, government agencies, and other stakeholders.

Together, these theories supply the conceptual foundation for the study. Inclusive Education Theory establishes the goal of providing equitable education for learners with disabilities; Human Capital Theory stresses the importance of developing and sustaining a competent SNED workforce; and Systems Theory explains how workforce planning must integrate learner needs, teacher capacity, institutional support, and educational policies. Collectively, these theories support the development of the Special Education Teacher Workforce Planning Framework (SETWPF) as a strategic model for strengthening the SNED workforce and improving inclusive education planning in Parañaque City.

CONCEPTUAL FRAMEWORK

This study is guided by the Special Education Teacher Workforce Planning Framework (SETWPF), an original conceptual model developed to support systematic, evidence-based workforce planning for Special Needs Education (SNED). Rather than being developed independently, the framework was synthesized from the principles of Inclusive Education Theory, Human Capital Theory, and Systems Theory, together with established workforce planning concepts reported in the inclusive education and human resource planning literature. Empirical findings generated from the documentary analysis of official administrative records in the Schools Division Office of Parañaque City further informed its development.

The framework conceptualizes workforce planning as a continuous and interconnected process in which learner demand, workforce supply, organizational capacity, and policy measures influence one another. It recognizes that effective inclusive education depends not only on increasing the number of teachers but also on ensuring workforce development is purposefully aligned with learner needs, institutional capacity, and long-range academic goals.

The SETWPF consists of five interrelated phases. Phase 1 (Learner Needs Assessment) identifies the current and projected demand for special education services by examining learner enrollment, disability profiles, educational support requirements, and

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demographic trends. Phase 2 (Workforce Mapping) documents the existing SNED workforce, including teacher qualifications, deployment, plantilla positions, professional preparation, and geographic distribution. Phase 3 (Workforce Capacity Analysis) systematically compares learner demand with workforce supply to identify staffing shortages, competency gaps, deployment inequities, and future workforce requirements. Phase 4 (Strategic Workforce

Development) translates these conclusions into evidence-based interventions, including teacher preparation, recruitment, plantilla expansion, professional development, retention, and policy support. Finally, Phase 5 (Improved Inclusive Education Outcomes) evaluates the efficiency of these strategies through indicators such as learner access, participation, educational achievement, teacher capacity, and system responsiveness.

A defining feature of the SETWPF is its continuous feedback mechanism. Outcomes generated in the final phase provide evidence for subsequent learner needs assessments, creating an iterative planning cycle that enables educational systems to respond to changing enrollment patterns, workforce conditions, and policy priorities. This feedback loop reflects the systems perspective that workforce planning is not a one-time activity but a continual process of monitoring, evaluation, and continuous improvement.

The conceptual validity of the framework is confirmed through its correspondence with three complementary perspectives. Inclusive Education Theory delivers the normative foundation by emphasizing equitable availability of quality education for learners with disabilities. Human Capital Theory explains the importance of investing in teacher preparation, professional development, and retention as mechanisms for strengthening educational quality. Systems Theory frames workforce planning as an interconnected process in which learner needs, teacher supply, institutional resources, and educational policies continuously interact. By uniting these theoretical perspectives with real-world evidence from official administrative records, the SETWPF delivers a coherent and evidence-informed framework for workforce planning.

Unlike conventional workforce planning models that primarily focus on staffing levels or personnel allocation, the SETWPF integrates learner needs assessment, workforce analytics, strategic planning, implementation, and continuous assessment into a single planning cycle specifically designed for inclusive education. Consequently, the framework functions not only as the conceptual foundation of this study but also as a practical decision-support model that may assist school divisions, local government units, higher education institutions, and education policymakers in developing sustainable and responsive SNED teacher personnel strategies.

Figure 2

Special Education Teacher Workforce Planning Framework (SETWPF)



Note. The Special Education Teacher Workforce Planning Framework (SETWPF) illustrates a cyclical, data-informed process that aligns learner needs with workforce planning strategies to strengthen the capacity and quality of special education teachers and enhance inclusive education outcomes.

Figure 2. Special Education Teacher Workforce Planning Framework (SETWPF), showing the cyclical alignment of learner needs and workforce planning strategies to improve inclusive education outcomes.

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METHODOLOGY

Research Design

This study employed a descriptive documentary research design utilizing secondary data analysis to examine the adequacy of the Special Needs Education (SNED) teacher workforce in the Schools Division Office (SDO) of Parañaque City. Documentary research is an appropriate approach for studies that analyze existing official records and institutional documents to generate evidence for educational planning and policy development. Unlike survey or experimental research, documentary research allows researchers to examine naturally occurring administrative data without influencing the study environment.

The study adopted a quantitative descriptive approach by analyzing officially reported workforce and learner data to determine the current capacity of the SNED workforce, identify workforce gaps, and examine their implications for inclusive education planning.

Research Locale

The study was conducted using administrative records obtained from the Schools Division Office of Parañaque City, Department of Education, Philippines. The division oversees the implementation of basic education programs, including inclusive education services for learners with disabilities enrolled in public elementary and secondary schools.

As of the reporting period, the division served 1,729 learners with special needs distributed throughout various public schools while employing 28 plantilla SNED teachers, 54 general education teachers assigned to inclusive education, and approximately 2,700 teachers who had completed SNED-related professional development programs. These official records formed the basis of the workforce analysis.

Data Sources

The study relied exclusively on secondary data obtained from official administrative records of the Schools Division Office of Parañaque City. The documents included: the division's official Enhanced Basic Education Information System enrollment reports detailing disability profiles and learner distribution across grade levels, complemented by personnel deployment summaries and plantilla item inventories from the administrative services division. Additional institutional records encompassed professional development tracking registries maintained by

the human resource development division, which cataloged completed specialized training credentials and certification statuses for educators across all district schools. These archival datasets underwent rigorous cross-tabulation to reconcile discrepancies between enrolled learner demographics and authorized teaching unit allocations.

- official learner enrollment records for learners with disabilities;
- personnel records showing the number and deployment of plantilla SNED teachers;

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- records of general education teachers assigned to inclusive education programs;
- professional development records documenting teachers who completed SNED-related training; and
- official workforce planning reports and division administrative documents relevant to inclusive education.

These records were selected because they represent the most authoritative and comprehensive source of workforce information available within the division.

Data Collection Procedure

Permission to access administrative records was obtained from the appropriate officials of the Schools Division Office of Parañaque City. Only officially validated documents intended for administrative and planning purposes were included in the analysis.

The documentary review followed a systematic procedure consisting of the following stages:

1. Identification of relevant official records related to learner enrollment and SNED teacher workforce;
2. Verification of document authenticity and completeness through official administrative sources;
3. Extraction of quantitative data related to learner population, teacher deployment, plantilla positions, and teacher professional development;
4. Organization of extracted data into summary tables; and
5. Descriptive analysis and interpretation of workforce capacity relative to learner demand

This systematic procedure ensured uniformity and accuracy throughout the documentary analysis.

Data Analysis

The study employed descriptive statistical analysis to summarize workforce characteristics and determine workforce adequacy. Frequencies, percentages, teacher-to-learner ratios, and comparative analyses were used to describe the current SNED workforce.

The analysis focused on four major indicators:

- number of learners with special needs;
- number of permanent SNED teachers;
- number of general education teachers supporting inclusive education; and
- number of teachers who completed SNED-related professional development.

These indicators were compared with existing Department of Education recommendations and current inclusive education policies to determine workforce sufficiency and identify planning implications.

The descriptive statistical results were then reviewed through the lens of the Special Education Teacher Workforce Planning Framework (SETWPF). This framework guided the systematic interpretation of the quantitative workforce data by structuring the identification of supply levels, examination of workforce capacity gaps, and formulation of strategic workforce planning interventions based on the documented evidence.

Trustworthiness of Documentary Data

To improve the credibility of the findings, only official administrative documents issued by the Schools Division Office of Parañaque City were used. Data were cross-verified across multiple administrative reports to guarantee consistency of reported enrollment figures, workforce numbers, and professional development records.

Because the study relied exclusively on official government records rather than self-reported information, the likelihood of response bias was minimized. Furthermore, all interpretations were grounded solely on documented evidence contained in authenticated institutional records.

Ethical Considerations

This study entailed secondary analysis of administrative records and did not involve direct participation of human respondents. Consequently, no interviews, surveys, or experimental procedures were undertaken. Permission to use the administrative data was secured from the Schools Division Office of Parañaque City. The records were analyzed only in aggregated form, ensuring that no individual learner, teacher, or school could be identified. All information was treated with strict confidentiality and was used solely for scholarly and educational planning purposes. The interpretations and conclusions put forward in this study represent those of the author and do not necessarily reflect the official position of the Department of Education or the Schools Division Office of Parañaque City.

RESULTS

Workforce Profile of Special Needs Education Teachers in Parañaque City

Analysis of official administrative records revealed a substantial imbalance between the number of learners with special needs and the available specialist workforce in the Schools Division Office (SDO) of Parañaque City. During the reporting period, the division served 1,729 learners with special needs, supported by only 28 permanent (plantilla) Special Needs Education (SNED)

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teachers, 54 general education teachers assigned to inclusive education, and approximately 2,700 teachers who had completed SNED-related professional development. (Gatchalian, 2024)

Table 1 presents the overall workforce profile. While a considerable number of teachers have participated in professional development programs related to inclusive education, permanent specialist positions remain limited. This indicates that workforce expansion has largely occurred through capacity development programs rather than through the creation of additional SNED plantilla positions.

The workforce profile further demonstrates that inclusive education services in the division depend on a combination of specialist teachers and trained general education teachers. This staffing arrangement indicates the division's efforts to sustain inclusive education despite a limited specialist workforce.

Table 1. Special Needs Education Workforce Profile in the Schools Division Office of Parañaque City

Workforce Indicator	Frequency
Learners with Special Needs	1,729
Plantilla SNED Teachers	28
General Education Teachers Supporting Inclusion	54
Teachers with SNED-Related Professional Development	2,700

The data demonstrate that while the division has invested substantially in professional development, the number of permanent SNED teaching positions remains relatively limited. Although many teachers have received training in inclusive education, only a small proportion are formally employed as SNED specialists.

Teacher-to-Learner Workforce Capacity

Comparison of learner enrollment with the number of permanent SNED teachers showed a teacher-to-learner ratio of approximately 1:62, meaning that each permanent SNED teacher is theoretically responsible for an average of sixty-two learners with special needs. Gatchalian (2024)

This ratio substantially exceeds the commonly referenced Department of Education benchmark of approximately 1:15 for self-contained special education classes, showing a considerable disparity between learner demand and specialist workforce availability. (Parañaque City Compliance Audit Report 2024, n.d.)

The computed ratio reveals that the current number of permanent SNED teachers is insufficient to independently provide specialist educational services for all learners requiring intensive support. Consequently, the division depends heavily on collaborative service delivery involving general education teachers who have received SNED-related training.

Table 2. Current SNED Teacher-to-Learner Ratio

Indicator	Value
Learners with Special Needs	1,729
Plantilla SNED Teachers	28
Current Teacher-Learner Ratio	1:62
Ideal Ratio (DepEd Reference)	1:15

These results indicate that the current permanent SNED workforce alone is insufficient to provide individualized instructional support to all learners requiring special education services.

Distribution of Inclusive Education Support

The findings indicate that workforce capacity goes beyond the number of permanent SNED teachers. The assignment of 54 general education teachers to inclusive education demonstrates the division's adoption of collaborative instructional approaches in response to limited specialist staffing. (Raguindin & Ping, 2025)

Moreover, the presence of approximately 2,700 teachers with SNED-related professional development shows a strong institutional commitment to reinforcing inclusive education competencies across schools. (Felipe, 2024) This widespread participation in training suggests that teacher capacity has expanded considerably; however, professional development alone does not increase the number of formally designated SNED positions.

The data therefore reveal a distinction between professional capacity and workforce capacity. While teacher competence has been enhanced through extensive training, the availability of permanent specialist personnel has not increased proportionately.

Workforce Planning Gap

The comparison of learner enrollment, specialist staffing, and teacher preparation reveals a clear workforce planning gap within the Schools Division Office of Parañaque City.

A corresponding increase has not matched the growing number of learners with special needs in permanent SNED positions.

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(Felipe, 2024) Although trained general education teachers make a substantial contribution to inclusive education, specialized responsibilities—including comprehensive assessment, Individualized Education Program (IEP) development, curriculum adaptation, behavioral intervention planning, multidisciplinary collaboration, and instructional consultation—continue to require qualified SNED specialists.

Taken together, these data indicate that the division has successfully expanded teacher preparedness through large-scale professional development initiatives but continues to face a shortage of permanent specialist personnel. The existing workforce model therefore depends on collaborative teaching arrangements to address increasing learner demand while drawing attention to the need for systematic workforce planning, planned deployment, and expansion of permanent SNED positions.

Overall, the findings show that strengthening inclusive education demands balancing teacher development with workforce expansion. Increasing the number of trained teachers alone is insufficient unless accompanied by sustained investment in specialist staffing that corresponds with the educational needs of learners with disabilities.

Table 3. Summary of Workforce Planning Indicators

Indicator	Observation	Planning Implication
High learner enrollment	1,729 learners	Increasing demand for specialized services
Limited plantilla SNED teachers	28 positions	Insufficient specialist workforce
Strong professional development participation	2,700 trained teachers	Capacity building has improved teacher readiness
Reliance on general education teachers	54 teachers	Collaborative models remain necessary
Workforce imbalance	Demand exceeds specialist supply	Strategic workforce planning is needed

Overall, the findings indicate that the Schools Division Office of Parañaque City has strengthened teacher preparedness through large-scale professional development initiatives. Nevertheless, the relatively small number of permanent SNED teaching positions limits the division's capacity to address the educational needs of learners with disabilities fully. These results underscore the importance of systematic workforce planning that integrates teacher recruitment, plantilla expansion, strategic deployment, and sustained professional development to support inclusive education.

INTERPRETATION

The Schools Division Office serves 1,729 learners with disabilities through a workforce composed of 28 plantilla SNED teachers and 54 general education teachers who support inclusive education. Although 2,700 teachers have completed SNED-related professional development, only a small proportion occupy permanent SNED positions. (El-Hamamsy et al., 2023) These outcomes indicate that the division has invested in improving teacher capacity through training, but a comparable expansion of specialized plantilla positions has not yet matched such efforts.

In practical terms, the results suggest that inclusive education in Parañaque City is being sustained by a mixed staffing arrangement in which general education teachers supplement the limited number of permanent SNED teachers. This implies that workforce development has progressed in terms of teacher preparation, but the small number of specialized positions available still constrains workforce sufficiency. Taken together, the data show that capacity building alone is not enough to meet learner needs fully; it must be accompanied by deliberate staffing, deployment, and position creation aligned with the actual demand for special needs education services.

DISCUSSION

The present study provides localized empirical evidence on the adequacy of the Special Needs Education (SNED) teacher workforce in the Schools Division Office of Parañaque City and its consequences for inclusive education planning. Analysis of official administrative records revealed that 1,729 learners with special needs are currently served by only 28 permanent SNED teachers, supported by 54 general education teachers assigned to inclusive education and approximately 2,700 teachers who have completed SNED-related professional development. This evidence shows that while the division has made considerable investments in teacher capacity building, the number of permanent specialist positions remains relatively limited in relation to learner demand.

The findings support international evidence that the availability of qualified special education teachers is an essential determinant of successful inclusive education. UNESCO (2020) emphasizes that inclusive education depends not only on legislative commitment but also on sufficient numbers of qualified personnel capable of delivering individualized educational support. Similarly, OECD (2018) identified teacher shortages as one of the principal barriers to fair educational opportunities for learners with disabilities. The workforce profile observed in Parañaque City reflects this broader international challenge, demonstrating

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that workforce adequacy remains an important consideration even when professional development opportunities are widely available.

The computed teacher-to-learner ratio of approximately 1:62 further illustrates the disparity between learner demand and the existing specialist workforce. (Chan & Walker, 2022) Although this ratio should not be interpreted as a direct measure of service quality because inclusive education increasingly relies on collaborative teaching models, it nevertheless draws attention to the substantial workload carried by permanent SNED teachers. Department of Education guidance recognizes the need for smaller instructional groups in special education settings to facilitate individualized assessment, curriculum adaptation, behavior intervention, and persistent monitoring of learner progress. Consequently, the present findings show that the current specialist workforce may experience considerable demands in fulfilling these responsibilities while simultaneously supporting inclusive education initiatives across schools.

Another important finding is the significant number of teachers who have completed SNED-related professional development. This demonstrates the Schools Division Office's devotion to strengthening teacher competencies and expanding institutional capacity for inclusive education. Previous Philippine studies have consistently identified professional development as an essential factor shaping teachers' readiness to implement inclusive practices (Cabello et al., 2025; Kilag et al., 2025; Macabenta et al., 2023). The present findings reinforce this evidence by showing that teacher training has reached a substantial portion of the division's workforce. However, the results also indicate that professional development alone cannot fully compensate for the limited availability of permanent SNED positions. Training enhances instructional competence, but specialized responsibilities—including comprehensive assessment, Individualized Education Program (IEP) development, multidisciplinary coordination, and instructional consultation—continue to require formally designated special education professionals.

The study also demonstrates the increasing importance of collaborative practice in inclusive education. The participation of 54 general education teachers in delivering inclusive services reflects the collaborative model promoted under Republic Act No. 11650 and its Implementing Rules and Regulations, wherein responsibility for educating learners with disabilities is shared among SNED teachers, general education teachers, school administrators, families, and allied professionals. Rather than functioning independently, SNED teachers increasingly serve as instructional leaders, consultants, and coordinators who support inclusive classroom practices. This evolving role underscores the need for workforce planning strategies that strengthen both specialist staffing and collaborative teaching capacity.

From a policy perspective, the findings highlight the importance of workforce planning that extends beyond teacher training. Although expanding professional development remains essential, sustainable implementation of inclusive education also requires strategic recruitment, the creation of additional plantilla positions, equitable deployment of qualified personnel, and long-term retention strategies. Workforce planning should be informed by localized administrative data that accurately reflect learner enrollment, disability prevalence, geographic distribution, and projected service demands. Such evidence-based planning can assist policymakers in allocating resources more efficiently while ensuring that staffing decisions remain responsive to changing educational needs.

The findings likewise support the usefulness of the Special Education Teacher Workforce Planning Framework (SETWPF) proposed in this study. By integrating learner needs assessment, workforce mapping, capacity analysis, strategic workforce development, and continuous evaluation, the framework offers a systematic approach to strengthening the SNED workforce at the division level. Unlike conventional staffing approaches that focus primarily on position allocation, the SETWPF emphasizes continuous evidence-based planning that aligns workforce development with educational demand. This framework may therefore serve as a practical planning model not only for the Schools Division Office of Parañaque City but also for other school divisions seeking to strengthen inclusive education systems through data-informed decision-making.

Overall, the findings suggest that the Schools Division Office of Parañaque City has established a strong foundation for inclusive education through sustained professional development and collaborative teaching initiatives. Nevertheless, achieving the objectives of inclusive education requires continued investment in specialized human resources alongside institutional mechanisms that support recruitment, retention, deployment, and long-term workforce sustainability. Strengthening these interrelated components will enable education systems to better respond to the increasing educational needs of learners with disabilities while advancing the goals of equitable and inclusive education envisioned in both national and international policy frameworks.

LIMITATIONS OF THE STUDY

This study has several limitations that should be considered when interpreting its findings. First, the analysis was based exclusively on secondary data obtained from official administrative records of the Schools Division Office (SDO) of Parañaque City. Although these records are considered authoritative for educational planning, the study was limited to the variables available in the existing documents. It could not capture additional factors such as teacher workload, competencies, job satisfaction, retention intentions, or the quality of instructional practices.

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Second, the study employed a descriptive documentary research design and did not involve primary data collection from teachers, school administrators, learners, or parents. Consequently, the findings describe the current status of the Special Needs Education (SNED) workforce but do not explain the underlying organizational, financial, or contextual factors contributing to workforce shortages or staffing decisions.

Third, the study was confined to a single local school division. Workforce conditions, learner demographics, resource availability, and staffing policies may differ across other school divisions in the Philippines. Therefore, the findings should not be generalized to all educational contexts without considering local variations.

Finally, while the study introduces the Special Education Teacher Workforce Planning Framework (SETWPF) as an evidence-informed conceptual model synthesized from established theories, workforce planning literature, and the present findings, the framework has not yet undergone external empirical validation. Future studies may strengthen its applicability by evaluating the framework through expert review, Delphi techniques, pilot implementation in other school divisions, or longitudinal workforce planning studies.

Despite these limitations, the study provides valuable localized evidence on the adequacy of the Special Needs Education teacher workforce using official administrative data. It contributes an original workforce planning framework that may inform policy development, strategic staffing, teacher education, and inclusive education planning in Parañaque City and other school divisions with similar workforce challenges.

CONCLUSION

This study provides localized evidence on the Special Needs Education teacher workforce in the Schools Division Office of Parañaque. The findings indicate that although substantial investments have been made in teacher professional development, the number of permanent SNED teachers remains limited relative to the demand for specialized educational services. Strengthening inclusive education therefore requires not only continued training but also strategic workforce planning, expansion of teacher preparation programs, and evidence-based deployment of qualified SNED teachers. The proposed Special Education Teacher Workforce Planning Framework (SETWPF) offers a practical model that may assist school divisions, local governments, and higher education institutions in planning and strengthening the SNED workforce.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed to strengthen the Special Needs Education (SNED) teacher workforce and support sustainable inclusive education planning:

1. The Department of Education (DepEd) and the Schools Division Office (SDO) of Parañaque City should institutionalize annual workforce planning using evidence-based indicators. Workforce planning should incorporate learner enrollment, disability profiles, projected service demand, teacher qualifications, retirement projections, and workforce deployment to ensure that staffing decisions are responsive to current and future educational needs.
2. The Department of Education should prioritize the creation and equitable allocation of additional plantilla SNED teaching positions. Given the substantial disparity between learner enrollment and the current specialist workforce, workforce demand analyses, rather than fixed allocation practices, should guide staffing expansion. School divisions with increasing numbers of learners with disabilities should receive priority in the distribution of new positions.
3. The Schools Division Office should establish a comprehensive SNED workforce database. The database should integrate information on learner enrollment, teacher qualifications, professional development, deployment, vacancies, and projected workforce requirements. Such a system would support continuous workforce monitoring, succession planning, and evidence-based decision-making.
4. Professional development should be linked to strategic workforce deployment and career progression. Teachers who complete advanced SNED training should be prioritized for assignment to inclusive education programs, mentoring roles, leadership responsibilities, or appointment to permanent SNED positions when vacancies arise. Aligning professional development with career pathways will maximize the benefits of investments in teacher training.
5. Higher education institutions offering teacher education programs should strengthen the production of qualified SNED teachers. Colleges and universities should expand Special Needs Education programs, align curricula with the competency requirements of inclusive schools, and collaborate with the Department of Education to address projected workforce shortages through targeted teacher preparation initiatives.
6. Local government units should strengthen support for inclusive education through workforce development initiatives. Local governments may allocate resources for scholarships, continuing professional development, recruitment incentives, and partnerships with higher education institutions to increase the local supply of qualified SNED professionals.
7. The Special Education Teacher Workforce Planning Framework (SETWPF) should be adopted on a pilot basis in other school divisions. Pilot implementation would enable education administrators to assess the framework's practicality in workforce forecasting, staffing allocation, and strategic planning across different educational contexts. Findings from these pilot

applications may be used to refine and validate the framework for broader implementation.

8. Future research should extend workforce planning studies beyond a single school division. Comparative studies involving multiple divisions, regions, or provinces are recommended to determine whether similar workforce patterns exist across the Philippines. Future investigations may also incorporate qualitative methods to examine workforce retention, teacher mobility, leadership support, and organizational factors influencing staffing adequacy. In addition, longitudinal studies are recommended to evaluate the effectiveness of the SETWPF in improving workforce planning and inclusive education outcomes over time.

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