

Issues and Challenges of Special Needs Education Program in the Province of Isabela: Basis for a Proposed Enhancement Model

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Abstract

This study aimed to develop an Enhancement Model addressing the issues and challenges encountered in the implementation of Special Needs Education (SNED) in elementary schools in the Province of Isabela. It employed a sequential explanatory mixed-methods design. Quantitative data were gathered through a researcher-made questionnaire administered to 36 purposively selected teachers, school heads, and supervisors who had at least three years of direct involvement in SNED. The instrument, validated by seven experts and pilot-tested for reliability, measured the extent of challenges across access, quality, support, stakeholders, and training. Qualitative data were obtained through semi-structured interviews with selected survey respondents and analyzed using thematic analysis until saturation. Findings revealed a moderately experienced workforce that was predominantly non-specialized (66.7 percent general education background) with limited training exposure. Access was institutionally present yet constrained by financial, transportation, and geographic barriers. Quality was generally perceived as adequate, except for shortages of specialized support staff. Support and stakeholder engagement were functional at the school level but only moderately integrated systemically. Training opportunities existed but lacked sufficient specialization and continuity. Differences among respondent groups and across teacher profiles were largely non-significant. The study concludes that SNED is established but not fully equitable or optimized, providing an empirical basis for a context-responsive Enhancement Model focused on specialized competencies and continuous professional development. The research contributes to SDG 4 (Quality Education) by strengthening inclusive and equitable education for learners with disabilities, and to SDG 10 (Reduced Inequalities) by addressing barriers that limit equal access. Its sustainability impact lies in enhancing educational and institutional capacity, fostering more resilient school-community partnerships, and supporting policy-aligned improvements in inclusive education delivery.

Keywords: Access; Enhancement Model; Inclusive Education; Isabela; Quality; Special Needs Education; Stakeholders; Support; Training

1. Introduction

Inclusive education aims to provide equal academic opportunities to all students regardless of background, abilities, or disabilities. It fosters diversity, removes barriers, and promotes respect and understanding among learners (UNESCO, 1994; UNESCO, 2020). In the Philippines, the implementation of Special Needs Education (SNED) continues to face significant challenges, particularly the shortage of trained SNED teachers, inadequate resources and facilities, and inconsistent policy application. Many schools, especially in rural areas, lack educators

with specialized skills, accessible infrastructure, assistive technologies, and specialized learning materials (Alvaristo et al., 2022; Department of Education, 2019). Although Republic Act No. 11650 (2022) was signed in 2022, full preparation for mainstreaming learners with disabilities remains uneven across regions (UNESCO, 2009; Department of Education, 2025). According to the National Economic and Development Authority (n.d.), the Philippines has established national targets for Sustainable Development Goal 4 (SDG 4), which promotes inclusive and equitable quality education and lifelong learning opportunities. These targets include improving educational outcomes and ensuring that school facilities are responsive to the needs of learners with disabilities. Republic Act No. 11650 (2022), Republic Act No. 10533 (2013), and Republic Act No. 9442 (2007) provide relevant legal foundations for inclusive education in the Philippines. The Convention on the Rights of the Child (United Nations General Assembly, 1989) further reinforces the principles of non-discrimination and the right of children with disabilities to education. Despite these frameworks, recent national data reveal persistent gaps. The Senate of the Philippines (2024) reported 323,344 learners with disabilities enrolled in public schools for SY 2023–2024 against only 5,147 SNED teachers, reflecting a shortage of approximately 7,651 qualified teachers. More recent assessments show that only about 391,089 learners with disabilities (roughly 8% of the estimated 5.1 million children with disabilities) were enrolled in SY 2024–2025, and 60% of those enrolled lacked access to any SNED resource, center, or specialized teacher (EDCOM 2 & IDinsight, 2025; EDCOM 2, 2025). Custodio (2025) highlighted the continuing divide between the ambitious design of the Inclusive Education Act and actual implementation, particularly in funding, teacher preparation, and inter-agency coordination. In Isabela, these national issues are amplified by geographic distribution, limited local-government support, and insufficient continuous professional development among teachers (Salguet, 2025). Numerous educators handling SNED learners lack specialty certification and ongoing capacity building. Sustained teacher professional development is widely recognized as essential for effective inclusive education (Ewen et al., 2023; Tuerah, 2025; Wang et al., 2024). Contemporary Philippine studies consistently report that many receiving and SNED teachers feel inadequately prepared due to insufficient specialized training, limited materials, and weak institutional support (Salguet, 2025; Beltran et al., 2025; Quizana & Espiritu, 2023). International evidence further confirms that one-off seminars are insufficient; effective programs require sustained, content-focused, collaborative, and coaching-supported approaches (Wang et al., 2024; Dobson et al., 2024; Shi et al., 2025; Chong & Kong, 2019). Teachers, school heads, and supervisors often differ in their assessments of barriers, yet recent local research shows broad agreement on systemic constraints (Salguet, 2025). Collaboration among professionals, strong institutional support, and stakeholder engagement remain critical (Hansen et al., 2020; Booth & Ainscow, 2016; York-Barr et al., 2005; Pugach & Winn, 2011; Scruggs & Mastropieri, 2017). Theoretical models linking authentic leadership and inclusive culture (Srivastava & Shree, 2019; Yakubova, 2020) and studies on professional vision and self-efficacy (Keppens et al., 2021; Weber & Greiner, 2019) further underscore the importance of teacher preparation. Global systematic reviews and comparative studies continue to highlight persistent barriers across contexts (Amor et al., 2019; Opoku et al., 2021; Rante et al., 2020; Engelbrecht, 2020; Walton & Engelbrecht, 2024; Geleta, 2019). Higher-education and related investigations also examine faculty experiences, assistive technology, and social sustainability in inclusive settings (Rodríguez Herrero et al., 2020; Zholudova et al., 2022; Mirador & Lluz, 2021; Bodhi et al., 2021; Maconi et al., 2019; Wolff & Ehrström, 2020; Trentham et al., 2020; Xia et al., 2020; Zhang et al., 2020; Agbor Tabe & Evangeline Agwa Fomukong, 2020; Magyar et al., 2020; Niemi et al., 2018; Forlin et al., 2009; Sharma et al., 2018; Sharma & Sokal, 2016; Büssing et al., 2019; Senate Committee on Basic Education, 2025; Loreman, 2017). The present study addresses the limited empirical evidence specific to Isabela elementary schools by examining the issues and challenges in access, quality, support, stakeholders, and training as assessed by teachers, school heads, and supervisors. It aims to generate a context-responsive Enhancement Model aligned with local realities and national inclusive-education mandates. The study aligns principally with SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities), while also supporting SDG 17 through multi-stakeholder collaboration. It contributes to educational, institutional, socio-economic, community, and policy/governance sustainability by strengthening teacher competencies and informing more consistent implementation of inclusive education.

2. Material and methods

2.1 Research Design

This study adopted a mixed-method approach, specifically employing a sequential explanatory design that integrates both descriptive-quantitative and qualitative methods. In the first phase, quantitative data is collected through surveys and observational techniques to describe the characteristics of a population. This allows for an initial understanding of the subjects without intervention. The quantitative data also explores relationships between variables, using statistical techniques to measure the strength and direction of these relationships. In the second phase, qualitative methods are applied to provide deeper insights into the findings from the quantitative phase. Interviews or focus groups will be conducted to explain the relationships or patterns identified earlier, offering a richer understanding of the variables at play. This sequential explanatory design allows for detailed descriptions of the present situation while complementing it with qualitative insights that explore possible associations between variables, leading to a more in-depth understanding of the study.

2.2 Locale of the Study

This research was carried out in the province of Isabela, which is in the Philippines and is a bustling urban and rural center home to various educational institutions. Isabela, which is well-known for its unique combination of socio-economic and cultural backgrounds, provides an extensive and unique setting to investigate the implementation of inclusive education. The educational landscape of the province, which is comprised of several primary schools, is an ideal setting for analyzing the difficulties and practices in Special Needs Education from a variety of different points of view. Participants in this location, including School Heads, Teachers, and Parents, will offer insightful perspectives on the practical aspects of Special Needs Education. These points of view will represent the real-life complexity of this approach in a setting that is rich in diversity.

2.3 Respondents of the Study

The study employed purposive sampling in selecting the participants. This sampling technique was utilized to ensure that only individuals who possessed relevant knowledge and experience regarding the implementation of Special Needs Education (SNED) were included in the study. For the quantitative phase, teachers who were directly involved in the implementation of SNED programs were purposively selected as respondents. To qualify for inclusion, participants must have been teaching in SNED or handling learners with disabilities for at least three (3) years and must have been employed in public elementary schools implementing SNED within the Province of Isabela during the conduct of the study. Teachers with less than three years of experience in SNED implementation and those who were not directly involved in the delivery of SNED services were excluded from the study. School heads and education supervisors were likewise purposively selected based on their direct involvement in supervising, managing, monitoring, or supporting Special Needs Education programs. Only those with relevant responsibilities and experience in SNED implementation were included as participants. For the qualitative phase, selected participants were purposively chosen from among the survey respondents based on their experience, involvement, and ability to provide rich and meaningful information regarding the implementation of SNED. These participants were invited to participate in the interview to further explain and validate the quantitative findings of the study. The inclusion criteria for interview participants included: (1) direct involvement in the implementation of SNED programs, (2) at least three years of experience in Special Needs Education, and (3) willingness to participate in the interview process. Participants who did not meet these criteria or who declined participation were excluded from the qualitative phase of the study.

2.4 Sample and Sampling Procedure

The study employed purposive sampling to select participants who possessed relevant knowledge and experience in SNED implementation. For the quantitative phase, teachers directly involved in SNED programs in public elementary schools in Isabela with at least three years of experience handling learners with disabilities were included, while those with less experience or without direct involvement were excluded. School heads and education supervisors with relevant supervisory or support responsibilities in SNED were similarly selected. For the qualitative phase, participants were purposively chosen from the survey respondents based on their capacity to provide rich information, using the same experience and involvement criteria, with willingness to participate as an additional requirement.

2.5 Research Instrument

The primary instrument used in gathering quantitative data was a researcher-made questionnaire developed based on the objectives of the study and relevant literature on Special Needs Education (SNED). The questionnaire was designed to determine the level of implementation of Special Needs Education in Isabela in terms of Access, Quality, Support, Stakeholders, and Training. To ensure content validity, the questionnaire was subjected to expert validation. A total of seven (7) validators were invited to review and evaluate the instrument. The validators consisted of research experts, school heads, Special Needs Education teachers, and professionals with expertise in educational management and inclusive education. They examined the questionnaire for clarity, relevance, appropriateness, and alignment with the objectives of the study. Suggestions regarding revision, rewording, addition, and deletion of statements were incorporated in the final version of the instrument. After validation, the questionnaire underwent pilot testing among 6 respondents who were not included in the actual study. The purpose of the pilot testing was to determine the reliability and internal consistency of the instrument. The responses were subjected to Cronbach's Alpha analysis using the Statistical Package for the Social Sciences (SPSS). The questionnaire was composed of two parts: Part I gathered information regarding the respondents' position, years of experience, area of specialization, and number of trainings attended related to Special Needs Education. Part II measured the respondents' perceptions regarding the implementation of SNED in terms of Access, Quality, Support, Stakeholders, and Training. To gather qualitative data and further explain the quantitative findings, a semi-structured interview guide was utilized. The interview guide was developed based on the major findings of the quantitative phase and the objectives of the study. The interview guide consisted of main questions with corresponding probing and follow-up questions. The use of follow-up questions allowed the researcher to obtain richer descriptions, clarify responses, and explore issues that emerged during the interview process. Similar to the questionnaire, the interview guide underwent content validation to ensure that the questions were aligned with the objectives of the study. The same panel of seven (7) validators reviewed the interview questions and provided

recommendations regarding clarity, relevance, sequencing, and appropriateness. Their suggestions were incorporated before the conduct of the actual interviews. The interview guide served as the primary instrument for identifying the experiences, perceptions, challenges, and recommendations of the participants regarding the implementation of Special Needs Education. The qualitative findings generated from the interviews were used to explain, validate, and enrich the quantitative results obtained from the survey questionnaire.

2.6 Data Gathering Procedure

The study utilized a sequential explanatory mixed-methods design wherein quantitative data were gathered and analyzed first, followed by qualitative data collection to further explain and support the quantitative findings. Prior to the conduct of the study, permission to administer the survey questionnaire was secured from the Schools Division Office, school heads, and other concerned authorities. After obtaining the necessary approvals, the researcher personally visited the identified schools to administer the survey questionnaire. Before distributing the questionnaire, the respondents were oriented regarding the purpose of the study, the confidentiality of their responses, and their rights as participants. They were also informed that participation was voluntary and that they could withdraw from the study at any time without any consequence. The survey questionnaire was administered through a face-to-face approach. Copies of the questionnaire were personally distributed to the respondents and were retrieved immediately after completion. Respondents were given sufficient time to read and answer all items. The researcher remained available during the administration to clarify instructions and answer questions related to the questionnaire. Upon completion, all questionnaires were collected, checked for completeness, encoded, and prepared for statistical analysis. After the quantitative data had been analyzed, selected participants were purposively chosen for the qualitative phase of the study. The selection of participants was based on their ability to provide relevant information and deeper insights regarding the implementation of Special Needs Education (SNED) in Isabela. The researcher personally conducted face-to-face interviews with the selected participants. Prior to each interview, the purpose of the interview was explained, and informed consent was secured. Participants were assured that their identities and responses would be treated with utmost confidentiality and used solely for research purposes. The researcher carefully documented the participants' responses through detailed note-taking during the interview process. Clarification and follow-up questions were asked whenever necessary to ensure that the participants' responses were accurately captured. The interviews were conducted after the quantitative findings had been analyzed to allow the researcher to further explore, explain, and validate the results generated during the quantitative phase. To supplement the quantitative and qualitative data, documentary analysis was conducted. Relevant documents related to the implementation of Special Needs Education were examined, including school reports, program accomplishment reports, enrollment records, implementation reports, school improvement plans, and other available documents related to inclusive and special needs education. Access to these documents was secured through formal requests and approval from the concerned school heads and authorities. Only documents relevant to the objectives of the study were reviewed. Information obtained from these documents was treated with confidentiality and was used solely for research purposes. The researcher strictly observed ethical standards throughout the conduct of the study. Participation was voluntary, and informed consent was obtained from all participants prior to data collection. Respondents were informed about the objectives of the study, the confidentiality of their responses, and their right to withdraw at any stage of the research process. All information gathered from questionnaires, interviews, and documentary sources was treated with strict confidentiality. Names and other identifying information were excluded from the presentation of results. The collected data were used exclusively for academic and research purposes and were stored securely throughout the duration of the study.

2.7 Data Analysis Techniques

The data gathered in this study were analyzed using both quantitative and qualitative approaches following the Sequential Explanatory Mixed-Methods Research Design. Quantitative data were analyzed first to determine the issues and challenges in the implementation of Special Needs Education (SNED). The qualitative data were then analyzed to explain, validate, and provide deeper understanding of the quantitative results. The quantitative data obtained from the survey questionnaire were checked for completeness, coded, encoded, and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 27. Descriptive statistics, such as frequency count, percentage, weighted mean, and ranking, were used to describe the respondents' profile and determine their level of agreement on the issues and challenges encountered in the implementation of Special Needs Education in terms of access, quality, support, stakeholders, and training. To determine whether there was a significant difference in the respondents' perceptions when grouped according to position, years of teaching experience, area of specialization, and number of SNED-related trainings attended, the Chi-square Test of Difference was employed. All statistical tests were interpreted using the 0.05 level of significance. The qualitative data were gathered through interviews with selected participants. During the conduct of the interviews, the researcher carefully documented the responses through written notes. Immediately after each interview, the responses were reviewed, organized, and encoded to ensure that all relevant information provided by the participants was properly captured. Data gathering continued until data saturation was achieved. Data saturation was reached when similar responses and ideas repeatedly emerged from the participants and no new information was generated from the succeeding interviews. This indicated that sufficient qualitative data had been collected to explain and support the quantitative

findings of the study. The qualitative data were analyzed using Braun and Clarke's (2006) Thematic Analysis. The researcher first read and reviewed the interview notes several times to become familiar with the responses. Significant statements were identified and grouped according to similar ideas. Codes were then generated and organized into categories. From these categories, themes were developed and refined based on their relevance to the objectives of the study. The final themes were used to explain and support the quantitative results. To ensure the trustworthiness of the qualitative findings, member checking was employed. Selected participants were consulted to verify whether the interpretations and themes accurately reflected their responses and experiences. Their comments and clarifications were considered in refining the themes. In addition, the themes were compared with the quantitative findings to determine consistency between the two sets of data. This process helped strengthen the credibility and accuracy of the qualitative analysis. The themes generated from the interviews served as supporting evidence to explain the quantitative findings and provide a deeper understanding of the issues and challenges encountered in the implementation of Special Needs Education in Isabela. Credibility was established through member checking. Dependability was ensured by maintaining a systematic and organized documentation of the entire research process, including participant selection, interview procedures, coding, theme development, and data analysis. Confirmability was achieved by ensuring that all interpretations and conclusions were based on the actual responses of the participants. Transferability was established by providing a detailed description of the research setting, participants, data gathering procedures, and context of the study. The qualitative findings were compared with the quantitative results to determine whether the identified themes supported, explained, or expanded the statistical findings. The integration of both sets of data provided a more comprehensive understanding of the issues and challenges encountered in the implementation of Special Needs Education and served as the basis for the proposed Enhancement Model.

3. Results and Discussion

3.1 Teacher Profile and Preparedness

3.1.1 Profile of Respondents

Of the 36 respondents, 47.2 percent had below five years of SNED teaching experience, 30.6 percent had six to ten years, and 22.2 percent had eleven years and above. In terms of specialization, 66.7 percent came from general education backgrounds, 27.8 percent held formal specialization in SPED/SNED, and only 5.6 percent had disability-specific specialization. Regarding SNED-related trainings, 30.6 percent had attended one to three trainings, 33.3 percent had attended four to six, 11.1 percent had attended seven to ten, and 25.0 percent had attended more than ten. By position, 77.8 percent were teachers, while school heads and supervisors each comprised 11.1 percent. These profile data indicate a workforce that is moderately experienced yet predominantly non-specialized and with limited training exposure. The findings support Eklund et al. (2021), who emphasized that teaching experience influences teachers' confidence and effectiveness in inclusive settings. The predominance of general-education backgrounds aligns with Avramidis and Norwich (2019), who found that teachers without SPED training often experience greater difficulty in inclusive classrooms. The limited training exposure is consistent with Darling-Hammond (2017) and Guskey (2002), who stressed that sustained professional development is critical for improving teaching practices. Overall, the profile reinforces Florian and Camedda (2020), Loreman et al. (2019), and Loreman (2017) that teacher competence in inclusive education is shaped by specialized training and continuous professional development, underscoring the need for structured capacity-building interventions.

3.2 Extent of Challenges in SNED Implementation

3.2.1 Access

Respondents generally disagreed that services were inadequate or that enrollment procedures were unclear. However, they agreed or strongly agreed that transportation barriers (mean = 3.25), financial constraints (mean = 3.33), geographic limitations (mean = 3.00), and limited financial assistance (mean = 3.03) hindered access to Special Needs Education. Qualitative responses further revealed that long distances, lack of transportation, and financial difficulties prevented some children from attending school despite the availability of programs. These findings highlight the difference between the availability of educational services and their actual accessibility. Although school-based mechanisms are perceived to be in place, socioeconomic and geographic barriers continue to limit equitable participation, particularly among learners from remote and economically disadvantaged communities. The findings are consistent with Kuzmicheva and Afonkina (2020) and Musengi and Musengi (2020), who emphasized that transportation difficulties, poverty, and geographic isolation can restrict access to education even when services are available. Similarly, Ainscow (2020), UNESCO (2009), and UNESCO (2020) stressed that inclusive education requires not only the provision of services but also their equitable distribution and effective utilization.

3.2.2 Quality

Most quality indicators fell in the "Disagree" range, including overall service quality (mean 1.89), instructional materials (mean 2.06), curriculum relevance (mean 2.03), class size (mean 2.11), assessment practices (mean 2.03), and presence of Individualized Education Plans (mean 1.86). The sole "Agree" rating concerned inadequate

specialized support staff (mean 2.53). Qualitative data corroborated that instructional adaptations and IEPs were in place, yet specialized personnel such as therapists remained scarce. The pattern indicates that core instructional structures are viewed as adequate and functional, yet human-resource gaps limit the comprehensiveness of services. This distinction between instructional adequacy and systemic constraints is consistent with de Bruin (2019), who observed strong classroom practices alongside weak specialized support. Florian and Camedda (2020) and Loreman et al. (2019) noted that teachers can implement inclusive pedagogy even under less-than-ideal conditions, while Darling-Hammond (2017) and Guskey (2002) underscored the necessity of continuous professional development and institutional support for sustained quality.

3.2.3 Support (Administration/Peer)

All support indicators received “Disagree” ratings, with means clustered between approximately 2.08 and 2.39. Respondents did not view emotional, behavioral, counseling, referral, specialist, or parental-support mechanisms as entirely lacking, yet the moderate scores indicated that these systems were only partially developed. Qualitative responses confirmed basic school-level support while highlighting gaps in formal referral systems, assistive technology, and external partnerships. The findings suggest functional day-to-day support exists at the school level, but broader institutional and inter-agency mechanisms remain insufficiently integrated. This aligns with Hansen et al. (2020), who emphasized collaboration among teachers, families, and external professionals, and with Engelbrecht (2020), who highlighted limited institutional support and weak inter-sectoral coordination. Florian and Camedda (2020) and Loreman et al. (2019) argued that inclusive education requires comprehensive support systems, including specialists and assistive technologies, while Ainscow (2020) stressed whole-school and whole-community approaches.

3.2.4 Stakeholders

Stakeholder indicators predominantly fell in the “Disagree” to “Strongly Disagree” range, with particularly low means for parental exclusion from decision-making (mean 1.64), community-awareness promotion (mean 1.67), and family empowerment (mean 1.72). Moderate scores appeared for community participation and NGO involvement. Qualitative data affirmed active parental involvement and school-level communication, while noting limited external partnerships. These results indicate that stakeholder engagement is a relative strength at the school level, with participatory practices embedded in daily operations, yet external collaboration remains moderate. The findings support Ainscow (2020) and Booth and Ainscow (2016) on the value of robust school-family-community partnerships, while aligning with Opoku et al. (2021) and Engelbrecht (2020) that participation is often present but limited in scope and sustained cross-sector depth. Hansen et al. (2020) similarly emphasized shared responsibility among stakeholders.

3.2.5 Training

Most training indicators received “Disagree” ratings (means 1.91–2.36), indicating that professional-development opportunities, administrative support, and collaborative sharing were viewed as present. The sole “Agree” rating concerned limited training on specific learner characteristics and instructional strategies (mean 2.53). Qualitative accounts confirmed that available trainings were often general rather than disability-specific and lacked continuity or mentorship. The results point to a baseline training system that is functional yet insufficiently specialized and sustained. This is consistent with Darling-Hammond (2017) and Guskey (2002) on the need for ongoing, practice-linked professional development, and with Florian and Camedda (2020) and Loreman et al. (2019) on the necessity of specialized pedagogical skills. Avramidis and Norwich (2019) linked teachers’ confidence to training background, while Forlin et al. (2009) noted that many Philippine and international teachers handling learners with disabilities lack formal specialized preparation. Recent professional-development models further emphasize coaching, collaborative learning, and sustained support (Chong & Kong, 2019; Ewen et al., 2023; Wang et al., 2024).

3.3 Differences among Teachers, School Heads, and Supervisors

Across the five domains, chi-square tests yielded non-significant results ($p > .05$) for nearly all indicators. Teachers, school heads, and supervisors shared broadly similar perceptions, with school heads occasionally registering slightly higher concern on system-level issues and supervisors expressing more favorable views. The absence of statistically significant differences indicates that classroom-level and administrative perspectives converge on the major patterns of strengths and gaps. This convergence supports the interpretation that the identified challenges are systemic rather than role-specific.

3.4 Teacher Profile-Based Differences

When teachers were grouped by years of experience, specialization, and training, most indicators remained non-significant. One significant difference appeared in the access domain: teachers with six to ten years of experience reported higher agreement that local SNED services were inadequate (chi-square 8.56, $p = .04$). Mid-career teachers also tended to register higher means on several structural barriers. These limited significant differences suggest that while experience shapes sensitivity to certain access gaps, overall perceptions of SNED challenges

are shared across profile groups. The pattern is consistent with Ainscow (2020) and Darling-Hammond (2017), who noted that mid-career teachers often develop greater capacity to identify systemic barriers.

4. Conclusion & Recommendations

The study found that SNED implementation in Isabela is institutionally established, with school-level mechanisms for access, quality, support, stakeholder engagement, and training generally perceived as present and functional. However, equitable access remains constrained by transportation, financial, and geographic barriers; quality is limited by shortages of specialized support staff; support systems are only moderately integrated beyond the school; stakeholder engagement is strong internally but weaker externally; and training, while available, lacks sufficient specialization and continuity. Differences among teachers, school heads, and supervisors were largely non-significant, and profile-based variations were limited, indicating shared recognition of these systemic gaps. Collectively, the findings demonstrate a critical gap between the demands of inclusive education and current teacher preparedness, particularly given the predominance of non-specialized teachers with limited training exposure, thereby providing an empirical basis for a context-responsive Enhancement Model.

Based on the findings, a structured and sustained Enhancement Model focused on specialized SNED competencies, disability-specific pedagogies, continuous professional development, and strengthening of school-community partnerships is recommended to address the identified gaps in teacher preparedness, specialized support, and equitable access, thereby enhancing the effectiveness and sustainability of inclusive education in Isabela elementary schools.

5. Compliance with ethical standards

The researcher strictly observed ethical standards throughout the study. Participation was voluntary, and informed consent was obtained from all participants prior to data collection. Respondents were fully informed of the study's objectives, the confidentiality of their responses, and their right to withdraw at any stage without consequence. All information gathered from questionnaires, interviews, and documentary sources was treated with strict confidentiality. Names and other identifying details were excluded from the presentation of results. Data were used exclusively for academic and research purposes and were stored securely. Prior permission was secured from the Schools Division Office, school heads, and other concerned authorities before data collection.

REFERENCES

- Agbor Tabe, N., & Evangeline Agwa Fomukong, S. (2020). Inclusive teaching practices, minimizing violence and enhancing learning in the Cameroonian school milieu. *International Journal of English Language Education*, 8, 38. <https://doi.org/10.5296/ijelev.v8i2.16994>
- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16.
- Alvaristo, E. de F., Santinello, J., & Lira, A. C. M. (2022). Assistive technology: Possibilities and weaknesses mathematics for students with visual disabilities. **International Journal of Development Research*, 12*(6), 56484–56488.
- Amor, A. M., Hagiwara, M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke, K. M., & Aguayo, V. (2019). International perspectives and trends in research on inclusive education: A systematic review. *International Journal of Inclusive Education*, 23(12), 1277–1295. <https://doi.org/10.1080/13603116.2018.1445304>
- Avramidis, E., & Norwich, B. (2019). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 34(3), 287–304.
- Beltran, K. A., Agripa, S. A., Bustarga, A. J. O., Dela Cruz, K. B., Marmol, S. L., & Morallo, S. J. A. (2025). Practices and challenges in implementing inclusive education in Philippine elementary schools. **Journal of Education Research*, 6*(1), 8–22. <https://doi.org/10.37985/jer.v6i1.2251>
- Bodhi, R., Singh, T., Joshi, Y., & Sangroya, D. (2021). Impact of psychological factors, university environment and sustainable behaviour on teachers' intention to incorporate inclusive education in higher education. *International Journal of Educational Management*. <https://doi.org/10.1108/IJEM-02-2020-0113>
- Booth, T., & Ainscow, M. (2016). *The index for inclusion: Developing learning and participation in schools*. Centre for Studies on Inclusive Education.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Büssing, A. G., Menzel, S., Schnieders, M., Beckmann, V., & Basten, M. (2019). Values and beliefs as predictors of pre-service teachers' enjoyment of teaching in inclusive settings. *Journal of Research in Special Educational Needs*, 19(Suppl 1), 8–23. <https://doi.org/10.1111/1471-3802.12474>

- Chong, S., & Kong, C. A. (2019). Teacher professional learning and development in Singapore: A model of continuous improvement. *Asia Pacific Journal of Education*, 39(1), 87–100.
- Custodio, Z. (2025). Mind the gap: Bridging the divide between designing and implementing inclusion policies in the Philippines. *Australian Journal of Asian Law*, 26(1), 73–88.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291–309.
- de Bruin, K. (2019). The impact of inclusive education reforms on students with disability: An international comparison. *International Journal of Inclusive Education*, 23(7–8), 811–826. <https://doi.org/10.1080/13603116.2019.1623327>
- Department of Education. (2019). *Inclusive education policy framework for basic education* (DepEd Order No. 21, s. 2019, Annex 5). https://www.deped.gov.ph/wp-content/uploads/2019/08/DO_s2019_021.pdf
- Department of Education. (2025). *Implementing rules and regulations of Republic Act No. 11650, otherwise known as the “Instituting a Policy of Inclusion and Services for Learners with Disabilities in Support of Inclusive Education Act.”* https://www.deped.gov.ph/wp-content/uploads/IRR_R.A.-11650_INCLUSIVE-ED.pdf
- Dobson, G., Curran, H., & Perepa, P. (2024). Continuing professional development for Special Educational Needs and Disabilities within the school workforce. *British Journal of Special Education*. <https://doi.org/10.1111/1467-8578.12505>
- EDCOM 2. (2025, November 20). *5 million Filipino children with disabilities remain underserved – EDCOM 2 study*. <https://edcom2.gov.ph/5-million-filipino-children-with-disabilities-remain-underserved-edcom-2-study/>
- EDCOM 2, & IDinsight. (2025). *Accelerating support for learners with disabilities: Findings and policy priorities from a study on the early-stage implementation of the Inclusive Education Act*. <https://edcom2.gov.ph/publications/accelerating-support-for-learners-with-disabilities/>
- Eklund, G., Sundqvist, C., Lindell, M., & Toppinen, H. (2021). A study of Finnish primary school teachers’ experiences of their role and competences by implementing the three-tiered support. *European Journal of Special Needs Education*, 36(5), 729–742.
- Engelbrecht, P. (2020). Inclusive education: Developments and challenges in South Africa. *PROSPECTS*, 49(3), 219–232. <https://doi.org/10.1007/s11125-020-09499-6>
- Ewen, M., Ferreira, A., & Helder, M. G. D. (2023). Evaluation of an innovative model for teacher professional development on educational inclusion. *Professional Development in Education*. <https://doi.org/10.1080/19415257.2023.2283421>
- Florian, L., & Camedda, D. (2020). Enhancing teacher education for inclusion. *European Journal of Teacher Education*, 43(1), 4–8.
- Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers’ attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*, 13*(2), 195–209. <https://doi.org/10.1080/13603110701365356>
- Geleta, A. (2019). School heads and teachers’ perceptions of inclusive education in Sebeta Town Primary Government Schools, Sebeta, Ethiopia. *International Journal of Technology and Inclusive Education*, 8, 1364–1372.
- Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381–391.
- Hansen, J. H., Carrington, S., Jensen, C. R., Molbæk, M., & Secher Schmidt, M. C. (2020). The collaborative practice of inclusion and exclusion. *Nordic Journal of Studies in Educational Policy*, 6(1), 47–57. <https://doi.org/10.1080/20020317.2020.1730112>
- Keppens, K., Consuegra, E., & Vanderlinde, R. (2021). Exploring student teachers’ professional vision of inclusive classrooms in primary education. *International Journal of Inclusive Education*, 25*(9), 1091–1107. <https://doi.org/10.1080/13603116.2019.1597186>
- Kuzmicheva, T. V., & Afonkina, I. A. (2020). Social and educational barriers to inclusive education of individuals with special health needs. In I. Gafurov & R. Valeeva (Eds.), *Proceedings of the VI International Forum on Teacher Education: Perspectives and Priorities of Teacher Education in Times of Change, Choice and Challenge* (pp. 1353–1367). ARPHA Proceedings. <https://doi.org/10.3897/ap.2.e1353>
- Loreman, T. (2017). *Pedagogy for inclusive education*. Oxford University Press.
- Loreman, T., Deppeler, J., & Harvey, D. (2019). *Inclusive education: Supporting diversity in the classroom*. Routledge.
- Maconi, M. L., Green, S. E., & Bingham, S. C. (2019). It’s not all about coursework: Narratives of inclusion and exclusion among university students receiving disability accommodations. In *Promoting social inclusion* (Vol. 13, pp. 181–194). Emerald.
- Magyar, A., Krausz, A., Kapás, I. D., & Habók, A. (2020). Exploring Hungarian teachers’ perceptions of inclusive education of SEN students. *Heliyon*, 6(5), e03851.
- Mirador, M. G. I., & Lluz, L. P. P. (2021). Through the walls of inclusion: The higher education institution perspective in Philippines. *Asian Journal of Education and Social Studies*, 15(2), 28–34.

- Musengi, M., & Musengi, E. (2020). Working on the margins in Zimbabwe: The challenges and opportunities of inclusive rural education. In A. Masinire & A. P. Ndofirepi (Eds.), *Rurality, social justice and education in Sub-Saharan Africa Volume I* (pp. 125–149). Springer.
- National Economic and Development Authority. (n.d.). 2030 nationally determined numerical targets for the SDGs. <https://sdg.depdev.gov.ph/2030-nationally-determined-numerical-targets-for-the-sdgs/>
- Niemi, H., Lavonen, J., Kallioniemi, A., & Toom, A. (2018). The role of teachers in the Finnish education system: High professional autonomy and responsibility. In H. Niemi, A. Toom, A. Kallioniemi, & J. Lavonen (Eds.), **The teacher's role in the changing globalizing world: Resources and challenges related to the professional work of teaching** (pp. 47–61). Brill Sense.
- Opoku, M. P., Rayner, C. S., Pedersen, S. J., & Cuskelly, M. (2021). Mapping the evidence-based research on Ghana's inclusive education to policy and practices: A scoping review. *International Journal of Inclusive Education*, 25(10), 1157–1173. <https://doi.org/10.1080/13603116.2019.1600055>
- Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming: An untapped resource for induction. *Journal of Special Education Leadership*, 24(1), 36–46.
- Quizana, C., & Espiritu, M. (2023). Challenges encountered and coping strategies used by teachers in implementing SPED inclusive education program in public elementary schools of Third Congressional District, Division of Quezon. **Psychology and Education: A Multidisciplinary Journal*, 9*(6), 654–664. <https://doi.org/10.5281/zenodo.8025799>
- Rante, S., Helaluddin, H., Wijaya, H., Tulak, H., & Umrati. (2020). Far from expectation: A systematic literature review of inclusive education in Indonesia. *Universal Journal of Educational Research*, 8, 6340–6350.
- Republic Act No. 10533, Enhanced Basic Education Act of 2013 (2013). <https://issuances-library.senate.gov.ph/legislative%2Bissuances/Republic%20Act%20No.%2010533>
- Republic Act No. 11650, Instituting a Policy of Inclusion and Services for Learners with Disabilities in Support of Inclusive Education Act (2022). <https://issuances-library.senate.gov.ph/legislative%2Bissuances/Republic%20Act%20No.%2011650>
- Republic Act No. 9442, An Act Amending Republic Act No. 7277, Otherwise Known as the “Magna Carta for Disabled Persons,” and for Other Purposes (2007). <https://issuances-library.senate.gov.ph/legislative%2Bissuances/Republic%20Act%20No.%209442>
- Rodríguez Herrero, P., Izuzquiza Gasset, D., & Cabrera Garcia, A. (2020). Inclusive education at a Spanish university. *Disability & Society*, 36(3), 376–398.
- Salguet, M. A. J. (2025). Teachers' perspectives on the issues and challenges in the implementation of inclusive education. *Research and Advances in Education*, 4(7), 29–35. <https://doi.org/10.63593/RAE.2788-7057.2025.09.004>
- Scruggs, T. E., & Mastropieri, M. A. (2017). Making inclusion work with co-teaching. *TEACHING Exceptional Children*, 49(4), 284–293.
- Senate of the Philippines. (2024, December 8). **Gatchalian flags shortage of more than 7,000 ‘special needs education’ teachers** [Press release]. https://legacy.senate.gov.ph/press_release/2024/1208_gatchalian1.asp
- Senate Committee on Basic Education. (2025). Report on the implementation of Inclusive Learning Resource Centers. Senate of the Philippines.
- Sharma, U., Aiello, P., Pace, E. M., Round, P., & Subban, P. (2018). In-service teachers' attitudes, concerns, efficacy and intentions to teach in inclusive classrooms. *European Journal of Special Needs Education*, 33(3), 437–446.
- Sharma, U., & Sokal, L. (2016). Can teachers' self-reported efficacy, concerns, and attitudes toward inclusion scores predict their actual inclusive classroom practices? *Australasian Journal of Special Education*, 40(1), 21–38.
- Shi, Y. R., Sin, K. F. K., & Wang, Y. Q. (2025). Teacher professional development of digital pedagogy for inclusive education. *Teaching and Teacher Education*, 168, 105230.
- Srivastava, A. P., & Shree, S. (2019). Development of inclusive education theoretical model. *International Journal of Educational Management*, 33(6), 1271–1290.
- Trentham, B. L., Langlois, S., Sangrar, R., Stier, J., Cockburn, L., Cameron, D., Renwick, R., & D'Souza, C. (2020). Student engagement in peer dialogue about diversity and inclusion. **Journal of Occupational Therapy Education*, 4*(3). <https://doi.org/10.26681/jote.2020.040304>
- Tuerah, P. R. (2025). Teacher professional development in implementing inclusive education practices. **Naluri Edukasi Jurnal Pendidikan*, 2*(3), 117–130. <https://doi.org/10.64924/cs3h9b14>
- UNESCO. (1994). The Salamanca statement and framework for action on special needs education. UNESCO.
- UNESCO. (2009). Policy guidelines on inclusion in education. UNESCO.
- UNESCO. (2020). Global education monitoring report 2020: Inclusion and education – All means all. UNESCO.
- United Nations General Assembly. (1989). Convention on the Rights of the Child (Resolution 44/25). UNICEF. <https://www.unicef.org/child-rights-convention/convention-text>
- Walton, E., & Engelbrecht, P. (2024). Inclusive education in South Africa: Path dependencies and emergences. **International Journal of Inclusive Education*, 28*(10), 2138–2156. <https://doi.org/10.1080/13603116.2022.2061608>

- Wang, H.-T., Chen, P.-J., Lin, F.-Y., Chen, M.-C., & Hu, S.-T. (2024). Systematic review of effects and key components of in-service special education teacher training. *Education and Training in Autism and Developmental Disabilities*, 59(1), 97–112.
- Weber, K. E., & Greiner, F. (2019). Development of pre-service teachers' self-efficacy beliefs and attitudes towards inclusive education. *Journal of Research in Special Educational Needs*, 19(S1), 73–84.
- Wolff, L.-A., & Ehrström, P. (2020). Social sustainability and transformation in higher educational settings. *Sustainability*, 12, 4176.
- Xia, F., Lu, L., & Liu, C. (2020). Construction and analysis of lifelong inclusive education model. *International Journal of Elementary Education*, 9(2), 37.
- Yakubova, F. (2020). Inclusive culture – a key factor for success in inclusive education. *Science and School*, 123–129.
- York-Barr, J., Sommerness, J., Duke, K., & Ghore, G. (2005). Special educators in inclusive education programmes: Reframing their work as teacher leadership. *International Journal of Inclusive Education*, 9(2), 193–215.
- Zhang, D., Li, Y.-F., & Cavazos, M. (2020). Effective practices for teaching self-determination. In **Oxford Research Encyclopedia of Education**. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1184>
- Zholudova, A., Os'kin, D., Polyakova, O., & Vershinin, E. (2022). Problems of training students with disabilities in a medical university. *Bioethics*, 15, 55–58.