

## Tailoring Pre-Service Teacher Training Program in Local Context for Special Education Needs of Learners

Cortez, Angelica O., EdD.<sup>1\*</sup>, Cortez, Bernard Emil O., MA. Hist. <sup>1</sup>, Galman, Eunice T., MAEd<sup>1</sup>

<sup>1</sup>College of Education, Nueva Ecija University of Science and Technology, Sumacab, Cabanatuan City, 3100, Philippines

cortez.angelica@neust.edu.ph

**Abstract.** The study identified and described the need for a pre-service teacher training program specifically designed for learners with special educational needs (SEN) in the Philippine Local context, leading to the development of such program. Respondents included 120 basic education school administrators, 22 Teacher Education Institutions (TEIs), 245 students, and 245 parents. Utilizing a mixed-method approach that included surveys and unstructured interviews, the study found an almost absence of SEN clinics or therapy centers both within and outside school premises. Consequently, SEN learners are mainstreamed with regular students. Furthermore, none of the surveyed TEIs offered a pre-service teacher training program for SEN. Respondents-school administrators, TEIs, students, and parents- expressed positive views on the developed program, believing it would provide more opportunities for future teachers interested in SEN education. School administrators are confident that the program will address the long-term need for skilled teachers capable of providing quality education to young learners with SEN within basic education and other inclusive education agencies, clinics, and centers in the Philippines. The pre-service teacher training program includes carefully designed pedagogical and specialized courses to thoroughly prepare future SEN teachers. The program underwent a rigorous approval process and is now sanctioned for implementation within the research locale.

**Keywords:** Inclusive education; Pre-service teacher training program; Special education needs; Special Education; Teacher Education Institutions

### 1 Introduction

The most crucial stage of learning for a growing human takes place in the early years of life. This is also typically crucial when special needs in young learners are medically established. Developmental theorists Erik Erikson, Jean Piaget, Albert Bandura, and Lawrence Kohlberg all emphasized that early training is vital for sound and positive development. These early experiences are learned and consequently manifested in the behavior, responses, and performances of an individual as theorized by Sigmund Freud in his psychoanalytic theory. In the Philippines, Section 1 of Commission on Higher Education Memorandum Order (CMO) Number 77, series of 2017 acknowledged that the quality of life and their contributions to society as individuals and adults can be traced from their first years of life. However, development, can be hampered by various genetic or environmental factors and medical conditions, requiring special education needs (SEN). This situation highlights the need for trained individuals to ensure that young SEN learners can continue to live, learn, and integrate into society. Special education needs (SEN) learners are those with learning, physical, and developmental disabilities, as well as behavioral, emotional, and communication disorders, and learning deficiencies (Kryszewska, 2017). Ideally, SEN learners require a more attentive and specialized approach from individuals with special education training.

Acknowledging the role of the education system in supporting young learners with special education needs, the Philippines enacted Republic Act #11650, known as the Inclusive Education Act of 2022. This Act Institutionalizes a policy of inclusion and services for learners with disabilities supporting Republic Act #5250, which establishes a ten-year training program for teachers of special and exceptional children in the Philippines. These Acts have created a comprehensive, integrative, and sustainable national system for special education, involving multi-sectoral and inter-agency collaborations, care and development that is comprehensive, integrative, and sustainable national system for special children, involving multi-sectoral and inter-agency collaborations. The laws mandate that all schools, whether public or private, ensure equitable access to quality and inclusive education for every learner with disability or exceptional skills, accentuating the government's full responsibility to promote and protect the rights of every learner with special educational needs as flagged by United Nation's Sustainable Development Goal number 4. According to the United Nations Children's Fund (UNICEF Report, 2022), an estimate of 1.6 million Filipino children have disabilities. Data from the Department of Education Special Education (SpEd) profile of the Philippines revealed that 126,598 learners with disabilities were enrolled for school year (SY) 2021-2022, compared to about 232,975 learners with varying disabilities in SY 2016-2017 (DepEd Annual Report, 2023). The data showed a decrease in the number of SEN learners accessing formal learning opportunities in government supervise learning institution. Despite the mandate of these laws, special education classes at the elementary and secondary levels are only available in selected schools, and many SEN learners are mainstreamed with regular classes, (Labrague, 2018; De Jesus, 2018; Sumayan, et al., 2022).

Studies of Allam and Martin (2021) and Labrague (2018) over the years have highlighted the plight and challenges faced by teachers of learners with learning disabilities in Philippine basic education schools. These studies revealed that SEN teachers often lack relevant special needs education training resulting in shortage of teaching strategies, low self-esteem due to feeling unqualified as teachers felt they are not qualified to teach SEN learners, and such condition is highlighted by poor learning environment to support SEN learners' unique needs. Comprehensive reviews by Sumayan et al. (2022) of SEN related data from six countries practicing school mainstreaming of SEN learners found that most teachers were non-special education majors needing in-service training to equip them for their demanding responsibilities. The top SEN cases among those enrolled in mainstream classes are speech hearing impairment, Down syndrome, autism, learning disability and ADHD, intellectual disability, cerebral palsy and visual impairment (Labrague, 2018). Teachers often have little methodological and pedagogical background to address these needs. Additionally, many SEN learners cannot access special education classes due to their distance from the school exposing another interesting area of concern focused on the relationship between social class and SEN as expounded by Riddell, et al., (2016). These circumstances underscore the importance of special needs education training for teachers and pre-service teachers across every province, city or municipality in the Philippines .

Although laws require the hiring of licensed professional SEN teachers who have completed pre-service teacher training program for SEN learners, the limited availability of qualified applicants means SEN learners often remain in the mainstream classes. While

schools must respond to the call of inclusive education, teacher education institutions (TEIs) play crucial role in developing pre-service teacher training programs and consequently producing the necessary manpower for inclusive education. The collective efforts of the academic communities must address the challenges of providing special facilities and expertise needed to cater students with SEN. This is essential for all educational agencies to achieve the goal of providing responsive inclusive education for all exceptional children, (Allam & Martin, 2021; Kilag, et al., 2024, Galman, et.al. 2022). Hence, the conduct of the study found its meaning by establishing and describing the needs for a pre-service teacher training program tailored to young learners with special education needs and consequently developing a pre-service teacher training program for future SEN educators.

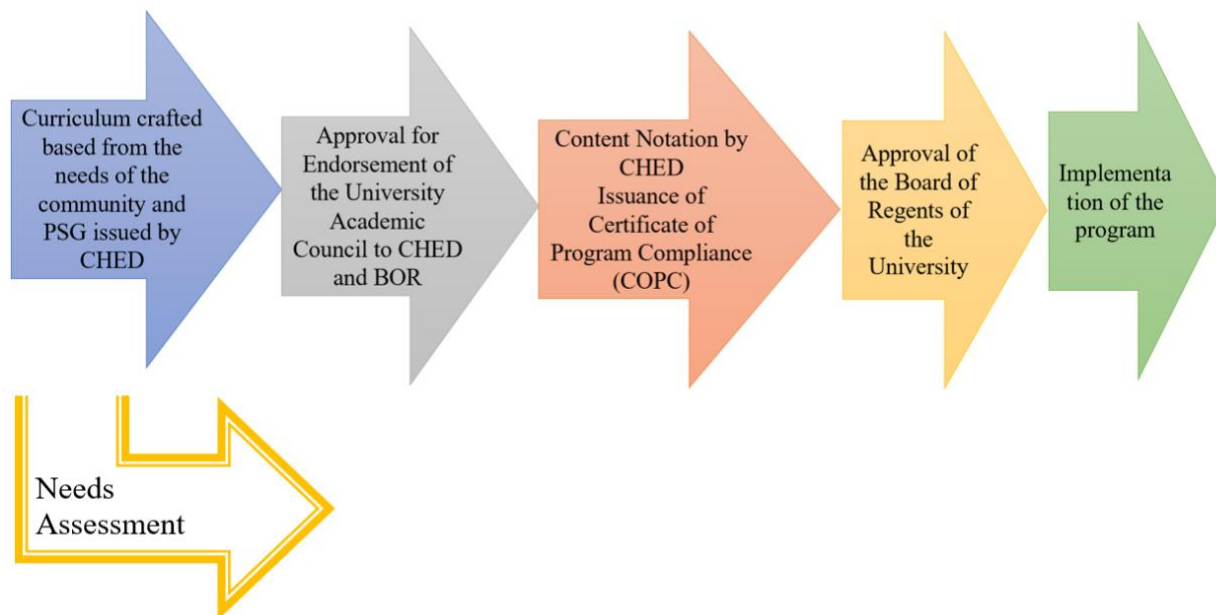
## 2 Methodology

The study adopted a mixed-method approach, combining qualitative and quantitative descriptive research methods. Data were gathered using two sets of survey instruments, distributed via google links. The first set was intended for 245 students and parents, querying on selected profile variables such as age and gender and along with eighteen (18) closed-ended questions. The respondent students were enrolled as Grade 12 students from the schools of the subject administrators and about to complete the basic education program and potential enrollees of the developed program.

The second set of survey instruments targeted 120 school administrators, including principals and heads of elementary and secondary integrated schools from an approximate total population of 684 population of principals and head teachers in the Schools Division Office of Nueva Ecija and Schools Division Office of Cabanatuan City. The survey queried on selected profile variables such as gender, position, and highest educational attainment along with seven (7) closed ended questions answered by the administrator respondents.

Data triangulation was achieved through unstructured random interviews with the three sets of respondents. Additionally, documentary analysis of the existing program offerings of 22 Teacher Education Institutions was conducted. Frequency count and percentage were utilized to interpret the gathered data.

The development of the pre-service teacher training program, which is the study's primary output, followed the ISO certified procedures of the Nueva Ecija University of Science and Technology (NEUST) as the implementing agency. The procedure is summarized and illustrated in Figure 1:



**Figure 1** Summary Procedure in Curriculum Development

### 3 Results

#### 1. Profile of the Respondents

**Table 1.** Profile of School Administrators, Parents, and Students

Variables		Frequency	Percentage
<i>School Administrators (N=120)</i>			
Position	Head Teacher	31	25.83%
	Principal	89	74.17%
Gender	Female	98	81.67%
	Male	22	18.33%
Highest Educational Attainment	Ph.D./Ed.D.	45	37.5%
	MA/MS with Units in Ph.D./Ed.D.	43	35.83%
	MA/MS	32	26.67
<i>Parents (N=245)</i>			
Gender	Male	35	14.29%
	Female	210	85.57%
Age	30-40 y/o	36	14.69%
	41-50	146	59.59%
	51-60	63	25.72%
<i>Students (N=245)</i>			
Gender	Male	20	7.8%
	Female	225	92.2%
Age	18-19	176	71.83%
	20-21	68	27.76%
	22 and above	1	0.41%

Table 1 outlines the profiles of three respondent groups. Among the 120 school administrators, 31 (25.83%) are school heads of smaller schools ( $\geq 6$  teachers), while 89 (74.17%) are principals of larger schools ( $\geq 9-10$  teachers). The group comprises 98 females

(81.67%) and 22 males (18.33%), with 45 (37.5%) holding doctorate degrees, another 45 (35.83%) currently pursuing doctoral studies, and 32 (26.67%) holding master's degrees.

Parent/guardian respondents include 210 females (85.57%) and 35 males (14.29%). Most are aged 41–50 (59.59%), followed by those aged 51–60 (25.72%) and ≤40 (14.59%). Student respondents consist of 225 females (92.2%) and 20 males (7.18%), with the majority aged 18–19 (71.83%), followed by 20–21 (27.76%), and one respondent over 21.

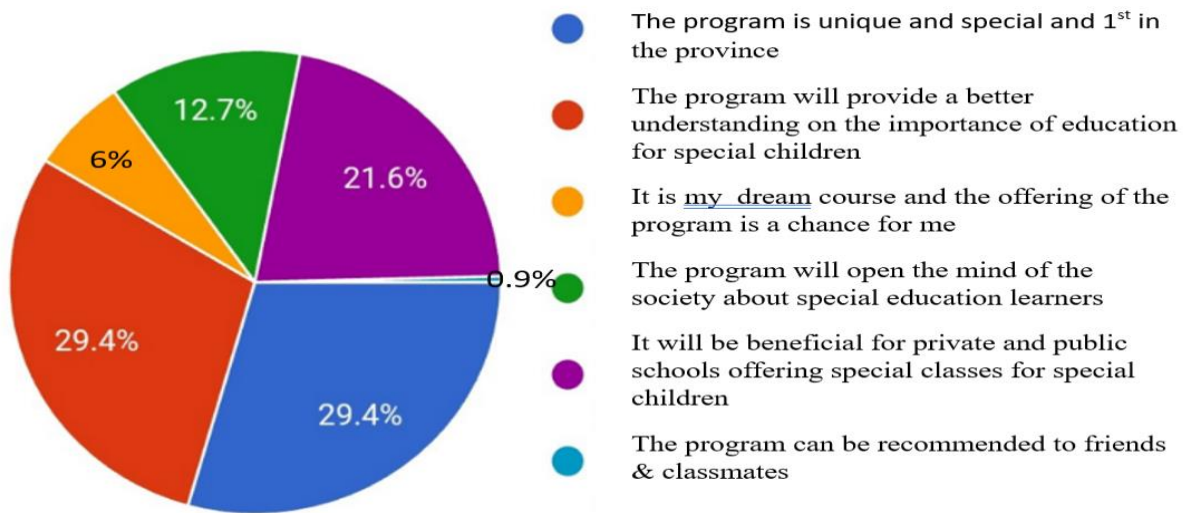
## 2. Teacher Education Institutions (TEIs) Offering Pre-service Teacher Training Program for SEN of Young Learners

**Table 2. Teacher Education Institutions Offering Pre-Service Teacher Training Programs**

Teacher Education Institution (TEI)	Status of Recognition	Elementary Education	Secondary Education	Special Education Needs	Other Education Programs
A	Private	X	X	X	/
B	Private	X	X	X	/
C	Private	/	/	X	X
D	Private	/	/	X	X
E	Public	/	/	X	/
F	Private	X	X	X	/
G	Private	/	/	X	X
H	Private	/	/	X	X
I	Private	/	/	X	X
J	Private	/	/	X	X
K	Private	/	/	X	X
L	Private	/	/	X	X
M	Private	/	/	X	X
N	Private	/	/	X	X
O	Private	X	/	X	X
P	Private	/	/	X	X
Q	Private	X	X	X	/
R	Public	/	/	X	/
S	Private	/	/	X	X
T	Private	X	X	X	/
U	Private	/	/	X	X
V	Private	/	/	X	X

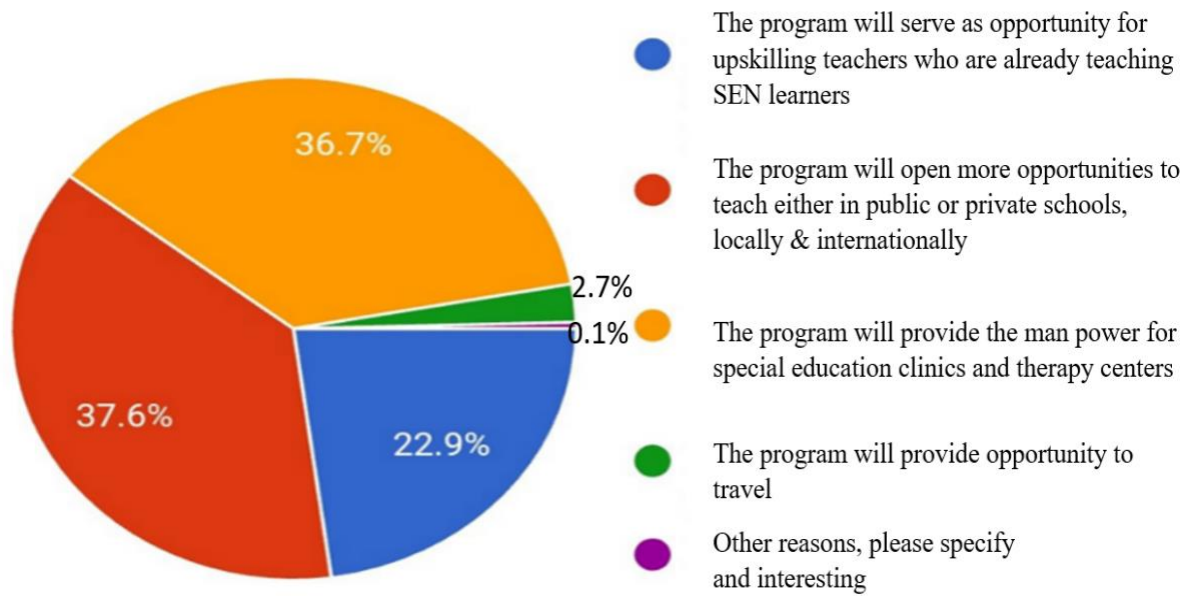
Table 2 presents the 22 teacher education institutions (TEIs) in the study area, comprising three universities (two public, one private) and 18 private colleges and 1 local government college. These institutions offer various pre-service programs, including elementary and secondary education, early childhood education, TLE, vocational-technological education, computer education, and physical education. However, none provide specialized pre-service training for teachers of young learners with special education needs (SEN). While 16 TEIs offer elementary education programs, their coverage of early childhood development and special needs education is limited and insufficient for preparing teachers to effectively support young SEN learners.

### 3. Students, Parents & School Administrators' Insights on the Development of a Pre-service Teaching Training Program for Young Learners with Special Educational Needs



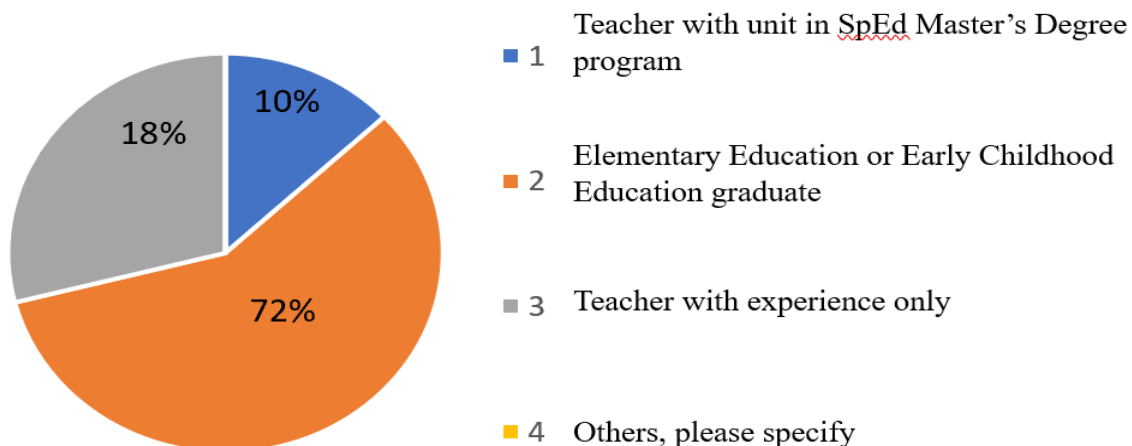
**Figure 2. Insights of students and parents about the offering of the program**

Figure 2 reveals strong support from both parents and students for the developed pre-service teacher training program for young SEN learners. Nearly one-third of respondents (29.4%) viewed the program as a unique opportunity within the province, eliminating the need to travel to other regions for specialized training. An equal proportion believed the program would deepen public understanding of the value of education for SEN learners. Additionally, 21.6% recognized its potential to address the urgent need for qualified SEN teachers in both public and private schools offering special classes. Parents shared personal accounts of children with special needs being excluded or prematurely withdrawn from school due to mainstreaming challenges. Students expressed enthusiasm for the program, citing a desire to better understand SEN learners and support special needs children within their own families. Furthermore, 12.7% believed the program could broaden societal awareness, while 6% considered it a “dream course,” with parental support reinforcing its appeal.



**Figure 3. Insight on Possible Opportunities**

Figure 3 illustrates respondents' perceptions of the potential career opportunities offered by the developed pre-service teacher training program for young learners with special educational needs (SEN). A significant portion (37.6%) of parents and students believed the program will open diverse teaching opportunities in both public and private schools, locally and abroad, due to the growing demand for qualified SEN educators (Boe, 2006; Murangi, Rothman & Nel, 2022). Additionally, 36.7% noted that special education clinics and therapy centers would benefit from professionals trained in inclusive pedagogies and intervention strategies (Kilag et al., 2024). Another 22.9% viewed the program as a pathway for current SEN teachers to upskill, thereby improving their confidence and effectiveness in inclusive classrooms (Allam & Martin, 2021; Labrague, 2018). Respondents also expressed optimism about the program's potential to foster rewarding careers and equip future educators with the necessary competencies to support diverse learners.



#### Figure 4. Insights of School Administrators on the Need for Pre-Service Teacher Training Program for SEN Learners

Figure 4 indicates that all surveyed elementary and integrated schools offer elementary education classes taught by graduates of pre-service elementary or early childhood education programs. However, in 120 schools, 86 (72%) have assigned these graduates to special education (SpEd) classes despite the absence of specialized pre-service training for teaching learners with special education needs (SEN). None of the identified teachers were graduates of programs specifically designed for SEN instruction. School administrators expressed a strong aspiration to transform every school into an inclusive education provider, particularly for SEN learners who are either enrolled in a limited number of SEN centers or remain unenrolled due to various barriers. Despite ongoing efforts, only 10% of SpEd teachers have earned units in SpEd-related master's programs, while 18% rely solely on experiential knowledge gained from handling SpEd classes.

#### 4. Features of the Developed Pre-service Teacher Training Program for SEN Learners

The development of the pre-service teacher training program for learners with special educational needs (SEN) was anchored on CHED Memorandum Order (CMO) No. 77, series of 2017, which outlines the policies, standards, and guidelines (PSG) for offering specialized teacher education in the Philippines. These PSGs provided the structural foundation for designing a comprehensive curriculum aligned with national standards for special and inclusive education. Globally, the emphasis on eligibility identification as a prerequisite for accessing special education services has gained traction, with formal school-based identification remaining essential for understanding the educational experiences of students with disabilities (Shurr, Minuk, & Chahine, 2024).

The program was carefully crafted in response to the documented needs of its intended beneficiaries and the broader community it serves (Ayson, 2018; De Jesus, 2018). Course offerings were selected directly from the CMO's content, with additional mandatory features integrated to ensure depth and relevance. The curriculum spans three years of intensive academic preparation, followed by a fourth year dedicated to immersion and practical application. Upon completion, graduates are awarded a diploma qualifying them to take the licensure examination for SEN teachers. This structure reflects global best practices, as highlighted by Hehir et al. (2016), who found that inclusive educational settings—where children with disabilities learn alongside their peers—yield significant cognitive and social benefits. To support such environments, teachers must be equipped with inclusive pedagogies that offer multiple modes of engagement, representation, and expression. Achieving this requires educators who are specifically trained to meet the diverse needs of SEN learners.

#### 4.1 Methods and Strategies

Table 3. Contents on Methods and Strategies of pre-service teachers training program for SEN Learners

Course Title (Decrypted from CMO #77, s. 2017)	Number of training hours
The Teaching Profession	54
The Child and Adolescent Learner and Learning Principles	54
Facilitating Learner - Centered Teaching	54
Technology for Teaching and Learning 1**	54
The Teacher and the School Curriculum	54
Assessment in Learning 1	54
Building and Enhancing New Literacies Across the Curriculum	54
Assessment in Learning 2	54
Foundation of Special and Inclusive Education	54
The Teacher and the Community, School Culture and Organizational Leadership	54
Methods of Research	54
<b>Total</b>	<b>594</b>

Table 3 presents the structured allocation of 594 training hours within the developed pre-service teacher education program for learners with special educational needs (SEN). This intensive training component is designed to equip future educators with the pedagogical methods, instructional strategies, and adaptive techniques essential for effectively supporting diverse and exceptional learners. Through this program, pre-service teachers will develop the competence to create safe, inclusive, and culturally responsive learning environments that honor the varied learning styles and developmental needs of SEN students. In alignment with CHED CMO No. 77, series of 2017, the curriculum emphasizes the integration of both general and specialized content, enabling future teachers to design differentiated instructional materials and tailor learning experiences to meet individual needs. Beyond pedagogical preparation, the program also addresses the pressing manpower demands of the research locale and the broader national context. This segment of the curriculum plays a critical role in refining the instructional design skills of pre-service teachers, ensuring they are well-prepared to contribute meaningfully to inclusive education systems.

## 4.2 Contents on Specialization

**Table 4. Contents of Required Specialization of SEN pre-service teachers training program**

Course Title (decrypted from CMO #77, s.2017)	Number of allotted hours
Learners with Developmental Disabilities	54
Learners with Sensory and Physical Disabilities	54
Learners with Emotional, Behavioral, Language and Communication Disabilities	54
Gifted and Talented Learners	54
Curriculum and Pedagogy in Inclusive Education	54
Educational Assessment of Student with Special Needs	54
Behavior Management and Modification	54
Adapted Physical Education and Recreation, Music and Health	54
Instructional Adaptations in Language and Literacy Instruction	54
Numeracy Development	54
Instructional Adaptations in Mathematics and Science Instruction	54
Instructional Adaptations for Teaching the Content of Areas (Social Sciences, Humanities)	54
Development of Individualized Education Plans	54
Transition Education	54
Literacy Development	54
Braille Reading and Writing	54
Teaching Multi-grade Classes	54
Research in Special Needs and Inclusive Education	54
Sign Language	54
Utilization of Instructional Technology in SEN	54
<b>Total</b>	<b>1080 hrs</b>

Table 4 details the allocation of 1,080 training hours within the developed pre-service teacher education program for learners with special education needs (SEN). This intensive specialization component is designed to prepare future SEN teachers to effectively teach, manage, and support students with additional needs across both inclusive and segregated educational settings, depending on individual learner profiles. The program equips educators to address a wide range of disabilities—including developmental, sensory, visual, language, and physical impairments—as well as other exceptionalities. Graduates will be capable of facilitating learning in mainstream classrooms, delivering targeted interventions in inclusive settings, or providing specialized services in dedicated SEN centers and clinics. This approach aligns with the Philippine government's commitment to decentralizing inclusive education, ensuring that quality services reach even the most remote communities. Upon completion, graduates will be qualified to serve as teachers, facilitators, special education therapists, or service providers, and will be eligible to take the licensure examination required for teaching in public institutions. The program thus responds not

only to pedagogical demands but also to national workforce needs in the field of special education.

#### 5. *Approval and Implementation of the Developed Pre-service Teacher Training Program for SEN Learners*

The developed pre-service teacher training curriculum for SEN learners underwent rigorous evaluation by the academic community within the research locale to ensure its relevance, quality, and alignment with institutional and national standards. Drawing from empirical data and the prescribed Policies, Standards, and Guidelines (PSG) issued by the Commission on Higher Education (CHED), the program was formally submitted for review. Upon thorough assessment, the CHED granted the government recognition through the issuance of Certificate of Program Compliance (COPC), affirming that the curriculum met all regulatory and academic requirements for implementation. The final endorsement was provided by the university's Board of Regents, solidifying institutional commitment to inclusive education. With these validation steps completed, the program is now fully approved and ready for rollout, marking a significant milestone in expanding access to specialized teacher preparation for learners with special educational needs.

## 4 Discussion

*Profile of the Respondents.* The findings reaffirm the pronounced feminization of the teaching profession in the Philippines, evident across all respondent groups. Female representation was dominant among school administrators, parents or guardians, and student respondents, reflecting longstanding cultural associations between teaching and traditionally feminine traits such as caregiving, nurturing, and support (Tasner, Mihelic, & Ceplak, 2017; Dhal Pravat, 2021). Most school administrators are principals of larger schools and possess or are pursuing advanced degrees, suggesting a strong professional orientation and leadership capacity within the sector. Parent respondents, demonstrated active involvement in their children's educational journeys, consistent with Nawabi et al. (2019), who emphasized the influential role of parents in shaping career decisions. Student respondents, largely within the typical college-entry age, are at a pivotal stage of specialization, further underscoring the importance of early exposure to inclusive education pathways and informed career guidance.

*Teacher Education Institutions (TEIs) Offering Pre-service Teacher Training Program for SEN of Young Learners.* The results underscore that the confidence and effectiveness of inclusive education teachers are strongly shaped by the depth of their training, academic preparation, and sustained professional development. As Sarginson (2017) emphasizes, pedagogical knowledge is essential for navigating the complexities of diverse classrooms, particularly those with learners who have special education needs (SEN). This is further supported by Tometten, Heyder, and Steinmayr (2021), who highlight the pivotal role of teacher competence in fostering inclusive learning environments. In today's educational landscape, teachers are expected to meet increasingly multifaceted demands, especially in

supporting SEN learners to achieve their full potential and contribute meaningfully to 21st-century society (Guerriero, 2017). These findings reinforce the imperative for teacher education programs to embed comprehensive and specialized training that equips educators for inclusive practice.

*Students, Parents & School Administrators' Insights on the Development of a Pre-service Teaching Training Program for Young Learners with Special Educational Needs.* The data underscore a strong demand for localized and specialized teacher education programs for learners with special education needs (SEN). Parents and students recognize the educational gaps and barriers faced by SEN learners, viewing the program's accessibility and uniqueness as vital to expanding inclusive education at the community level. Florian (2012) and Alvarez, et al. (2024) stresses the need to embed inclusive pedagogy in teacher preparation, while Avramidis and Norwich (2002) advocate for comprehensive training strategies to improve teaching effectiveness and learner outcomes. The urgency expressed by stakeholders, alongside the national shortage of SEN educators (UNICEF, 2022), highlights the program's relevance and timeliness. Supporting this, Darling-Hammond (2006) and Lukitasari, et al. (2025) emphasize the impact of teacher quality on student achievement, and Cochran-Smith & Lytle (1999) highlight the importance of ongoing professional development. Together, these insights affirm the necessity of investing in robust curriculum design and institutional support to build a competent and responsive SEN teaching workforce.

Moreover, findings highlighted the strong stakeholder endorsement of the pre-service teacher training program for SEN learners, emphasizing its relevance across both educational and therapeutic contexts. The anticipated availability of teaching jobs locally and abroad reflects a global shortage of qualified SEN educators and the growing emphasis on inclusive education systems (EE Boe, 2006; Ordanza-Cortez, 2023). The program's interdisciplinary potential—benefiting therapy centers and special education clinics—demonstrates its reach beyond traditional classroom roles (Kilag et al., 2024). It also serves as a professional development pathway for in-service teachers, supporting Allam and Martin's (2021) view that ongoing training enhances teacher efficacy. Additionally, Kang and Martin (2018) underscore the importance of shaping pre-service teachers' beliefs and preparedness for inclusive teaching. Collectively, these insights affirm the program's capacity to address workforce gaps, improve instructional quality, and advance inclusive practices across sectors. Furthermore, data highlights a significant gap between current teacher qualifications and the specialized demands of inclusive education. Ayson (2022) and Alfane (2020) point to persistent challenges in teacher preparation, particularly the reliance on general education graduates to teach SEN learners without adequate training. This underscores the urgent need for comprehensive pre-service and in-service programs that build inclusive pedagogical competencies. Systemic uncertainties also persist, as educators and parents differ in their views on the appropriateness of inclusive classrooms (Nilholm, 2020; Goransson & Nilholm, 2019). Florian (2012) and Avramidis & Norwich (2002) emphasize that inclusive pedagogy must be embedded in foundational teacher education to support the effective mainstreaming of diverse learners. Without such reforms, inclusive education risks being compromised by insufficient teacher readiness and institutional support.

*Features of the Developed Pre-service Teacher Training Program for SEN Learners.* The development of a localized, standards-based pre-service teacher training program for SEN learners carries significant implications for educational equity, teacher competency, and systemic reform. Grounding the curriculum in CHED CMO No. 77 ensures alignment with national policy while responding to the urgent need for specialized educators capable of creating inclusive learning environments. The integration of immersive training and licensure pathways not only professionalizes SEN teaching but also expands access to quality education for learners with disabilities—particularly those underserved by existing SEN centers. Globally recognized frameworks (Florian, 2012; Hehir et al., 2016) affirm that inclusive pedagogy benefits all learners when teachers are equipped to differentiate instruction and foster meaningful participation. Thus, this program serves as a strategic model for bridging the gap between policy and practice, empowering future educators to meet diverse learner needs and advancing the broader goal of inclusive, rights-based education in the Philippines.

## 5 Conclusions

The study confirmed that the teaching profession in the research locale is predominantly female, with school leaders emerging as lifelong learners. Pre-service students, strongly supported by their parents, show a clear willingness to pursue careers in special needs education. However, no Teacher Education Institution (TEI) in the area currently offers a pre-service program specifically for SEN learners. Positive feedback from stakeholders highlights strong support for the developed program, which is expected to generate employment opportunities and address the urgent need for pedagogically trained SEN teachers across learning communities.

School administrators recognized the program as vital to meeting the Department of Education's call for inclusive education, especially for the growing number of SEN learners, including those not yet enrolled. The curriculum's structure—comprising 594 hours on teaching methods and 1,080 hours on specialization—ensures comprehensive preparation aligned with global best practices. Developed in response to community needs, the program has undergone rigorous academic review, received CHED compliance approval, and was formally endorsed by the university's Board of Regents. This guarantees that graduates are equipped to foster inclusive, safe, and culturally responsive learning environments for diverse learners.

## References

- Alfane, E. E. (2020). Dataset of Special Education Teachers in Legazpi City, Philippines. *Puissant*, 1, 113-119. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-76787-5>
- Allam, F.C. & Martin, M. M. (2021). Issues and challenges in special education: A qualitative analysis from teacher's perspective. *Southeast Asia Early Childhood Journal*, Volume 10 (1), 37-49. <https://doi.org/10.37134/saecj.vol10.1.4.2021>. (Accessed on 15 January 2024).

Alvarez, J. I., Cortez, A. O., & Alberto, M. Z. (2024). Personalized learning in action: Utilizing AI-powered tutors to bridge the gap in mathematics. *International Journal of Research Studies in Education*, 13(8), 15-25. <https://doi.org/10.5861/ijrse.2024.24074>

Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. (Accessed 15 January 2024).

Ayson Reyes, C. L. (2023). A Systematic Review on the State of Special Education in the Philippines: Identifying Challenges, Gaps, and Future Directions. *Ignatian International Journal for Multidisciplinary Research*, 1(2), 409–420. <https://doi.org/10.5281/zenodo.10145772>. (Accessed 05 April 2024).

Boe, E.E. (2006). Long-term trends in the national demand, supply, and shortage of special education teachers. *The Journal of Special Education Needs*, 40 (3). 138-150. ERIC. Derived from <https://files.eric.ed.gov/fulltext/EJ758175.pdf> . (Accessed 15 February 2024).

Cochran-Smith, M., & Lytle, S.L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24 (1), 249-305. <https://doi.org/10.2307/1167272> . (Accessed 15 February 2024).

Commission on Higher Education Memorandum Order (CMO) No. 77, series of 2017. Policies, Standards and Guidelines for Bachelor of Special Needs Education. <https://ched.gov.ph/wp-content/uploads/2017/11/CMO-No.-77-s.-2017.pdf>

Darling-Hammond, L. (2006). Constructing 21<sup>st</sup>- century teacher education. *Journal of Teacher Education*, 57(3), 300-314. <https://doi.org/10.1177/0022487105285962>. (Accessed 15 February 2024).

Dhal, Pravat Kumar (2021). Women and teaching Profession. *ResearchGate*. <https://www.researchgate.net/publication/348659577> . (Accessed 02 February 2024).

Department of Education, Philippines Annual Report 2023. <https://www.deped.gov.ph/transparency/approved-budget-2023/>

De Jesus, L. (2018). Drop-in to special education centers in Bulacan. *African Educational Journal*. Vol. 6 (4), pp. 250-261. ERIC. DOI: 10.30918/AERI.64.18.090. ISSN:2354-2160. (Accessed 15 January 2024).

Göransson, K., and C. Nilholm. 2014. "Conceptual Diversities and Empirical Shortcomings – A Critical Analysis of Research on Inclusive Education." *European Journal of Special Needs Education* 29 (3): 265–280. doi:10.1080/08856257.2014.933545. (Accessed 02 February 2024).

Florian, L. (2012). Preparing teachers to work in inclusive classrooms: Key lessons for the professional development of teacher educators from Scotland's inclusive practice project. *Journal of Teacher Education*, 63(4), 275-285. (Accessed 15 January 2024).

Galman, SM., Cortez, A., Cortez, BE., & Tomas, MJ. (2022). Guidance and counseling and homeroom guidance in public schools: How do we do in this time of pandemic? Proceedings of the 3<sup>rd</sup> International Conference on Education and Technology (ICETECH 2022). *Atlantis Press*, Page 602-611, ISSN 2352-5398. [https://doi.org/10.2991/978-2-38476-056-5\\_58](https://doi.org/10.2991/978-2-38476-056-5_58)

Guerriero, S. (2017). Pedagogical knowledge and the changing nature of the teaching profession. *OECDiLibrary*, pages 99-118. <https://doi.org/10.1787/9789264270695-6-en>. (Accessed 04 December 2023).

Hehir, T., Grindal, T., Freeman, B., Lamoreau, R., Borquaye, Y., & Burke, Samantha (2016). A summary of evidences on inclusive education. <https://files.eric.ed.gov/fulltext/ED596134.pdf>. (Accessed 07 February 2024).

Kang, D. Y., & Martin, S. N. (2018). Improving learning opportunities for special education needs (SEN) students by engaging pre-service science teachers in an informal experiential learning course. *Asia Pacific Journal of Education*, 38(3), 319-347. <https://doi.org/10.1080/02188791.2018.1505599>. (Accessed 07 February 2024).

Kilag, O. K., Uy, F., Dela Cerna, Y.M., Doroy, E., Gomez, H.M., Rivera, A., & Castañares, J., (2024). Special Education: Challenges faced by teachers in the Philippines. *International Multidisciplinary Journal of Research for Innovation, Sustainability and Excellence (IMJRISE)*, 1 (7), 92-98. <https://risejournals.org/index.php/imjrise/article/view/569>. (Accessed 02 August 2024).

Kryszewska, H. (2017), Teaching Students with Special Needs in Inclusive Classrooms Special Educational Needs, *ELT Journal*, Volume 71 (4), 525-528. <https://doi.org/10.1093/elt/ccx042>. (Accessed 07 February 2024).

Labrague, C. (2018). Children with special education needs in the public elementary schools of Catbalogan City, Philippines. *ResearchGate*, 3 (3), 25-35. <https://www.researchgate.net/publication/331433036>. (Accessed 02 February 2024).

Lukitasari, M. et al. (2025) Development and validation of the STEP-DT instrument: A confirmatory factor analysis for assessing readiness STEM and design thinking competencies. *TEM Journal*. Volume 14, Issue 1, Page 836-847, ISSN 2217-8309, DOI:10.18421/TEM141-74, February, 2025.

Murangi, A., Rothman, S., & Nel, M. (2022). Special education teachers' job demands-resources profiles and capabilities: Effects on work engagement and intention to leave. *PMC PubMed Central*. DOI:10.3389/fpsyg.2022.942923. <https://ncbi.nlm.nih.gov/pmc/articles/PMC9606819/>. (Accessed 07 February 2024).

Nawabi, S., Javed, M. Q., Shujaulla, S. & Ulfat, H. (2019). Parental influence on career choice of their children: Literature review. *International Journal of Advanced Research (IJAR)*, Volume 7 (3), 221-227, <http://dx.doi.org/10.21474/IJARR01/8625> . (Accessed 05 January 2024).

Nilholm, C. (2020). Research about inclusive education in 2020 – How can we improve our theories in order to change practice? *European Journal of Special Needs Education*, 36(3), 358–370. <https://doi.org/10.1080/08856257.2020.1754547>. (Accessed 03 December 2023).

Ordanza-Cortez, Angelica. (2023). Meeting the needs of academically challenged sectors: Status of ALS for capability building program. *NRCP Research Journal*, 22(2), 1-23. <https://ejournals.ph/form/cite.php>

Republic Act # 11650. An Act institutionalizing a Policy of Inclusion and Services for Learners with Disabilities. [https://lawphil.net/statutes/repacts/ra2022/ra\\_11650\\_2022.html](https://lawphil.net/statutes/repacts/ra2022/ra_11650_2022.html)

Republic Act # 5250. An Act Establishing a Ten-Tear Training Program for Teachers of Special and Exceptional Children in the Philippines. [https://lawphil.net/statutes/repacts/ra1968/ra\\_5250\\_1968.html](https://lawphil.net/statutes/repacts/ra1968/ra_5250_1968.html)

Riddell, S., Weedon, E., Danforth, S., Graham, L., Hjörne, E., Pijl, S. J., & Tomlinson, S. (2016). Special education and globalization: Continuities and contrasts across the developed and developing world. *Discourse: Studies in the Cultural Politics of Education*, 37(4), 489–495. <https://doi.org/10.1080/01596306.2015.1073011> . (Accessed 02 February 2024)

Sarginson, C.E. (2017). An investigation into special educational needs training and the SENCO's role in practice change. A thesis submitted to the University of Manchester. *University of Manchester, United Kingdom*. <https://pure.manchester.ac.uk/ws/portalfiles/portal/84027753/F>. (Accessed 02 February 2024).

Shurr, J., Minuk, A. & Chahine, S. (2024) Special education eligibility trends and related factors: An analysis of the context in Ontario, Canada. *Journal of Research in Special Educational Needs*, 00, 1–14. Wiley. <https://doi.org/10.1111/1471-3802.12708> . (Accessed 01 August 2024)

Sumayan, K.R., Celendron, K., Declaro, N.P., & Flandez, D.L. (2022). Mainstreaming learners with special need in a regular classroom: A scoping review. *Universal Journal of Educational Research*, 1 (3), 106-114. (Accessed 20 April 2024).

Tasner, V., Mihelic, M.Z, & Ceplak, M. M. (2017). Gender in the teaching profession: University students' views of teaching as a career. <https://files.eric.ed.gov/fulltext/EJ1145804.pdf>. (Accessed 07 February 2024).

Tometten, L., Heyder, A. & Steinmayr, R. (2021). Links between teachers' knowledge about special educational needs and students' social participation and academic achievement in

mainstream classes. *Contemporary Educational Psychology*. Elsevier. Volume 67. <https://doi.org/10.1016/j.cedpsych.2021.102022>. (Accessed 20 April 2024).

UNICEF Annual Report (2022). <https://www.unicef.org/reports/unicef-annual-report-2022>. (Accessed 07 January 2024).