



## PERCEPTIONS OF TEACHERS TOWARD THE INCLUSION OF LEARNERS WITH HEARING IMPAIRMENT IN REGULAR CLASSROOMS

KIM C. CAGALITAN<sup>1</sup>, MARIE A. DELFIN<sup>2</sup>, JUDITHA D. MALICAY<sup>3</sup>

Cebu Technological University-Main Campus<sup>123</sup>

[kim.cuenco24@gmail.com](mailto:kim.cuenco24@gmail.com)<sup>1</sup>, [mariedelfin614@gmail.com](mailto:mariedelfin614@gmail.com)<sup>2</sup>, [judithdaniel149@gmail.com](mailto:judithdaniel149@gmail.com)<sup>3</sup>

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**Abstract** - *The study employed a descriptive correlational approach to explore teacher perceptions and preparedness for the inclusion of hearing impaired (deaf and hard of hearing) students in mainstream classrooms in selected public special education schools in Cebu Philippines. Through stratified convenience sampling, the research compared the views of both special education teachers and regular educators (N=75) to identify gaps in skills and training needs around inclusive practices for deaf students. Inclusion aimed to provide equal opportunities for all students, but effective implementation depended on teachers' perspectives, skills, and support. The findings from a descriptive correlational analysis aimed to guide improvements in maximizing inclusive education's potential to cultivate learning and participation regardless of ability. Recent research in the Philippine context revealed that teachers view inclusion positively but faced challenges in practice. Addressing such needs through targeted support strengthens teaching quality and benefits all students. The study's results can provide valuable insights for educators, policymakers, and other stakeholders in developing effective support strategies and interventions to improve educational opportunities and outcomes for students with disabilities in the Philippines.*

**Keywords:** *Cebu City, Philippines; Deaf/deaf Education; Descriptive Correlational; Hearing Impaired; Inclusion; Inclusive Practices; Special Education; Special Education Teachers; Stratified Convenience Sampling; Students with Disabilities*



## INTRODUCTION

Inclusive education aims to provide equitable learning opportunities for all students regardless of ability. While inclusive practices have gained momentum globally, effectively implementing these programs depends on key factors such as teacher perceptions, attitudes, and competencies in teaching diverse learners. Teachers play a crucial role in shaping inclusive classrooms and meeting student needs, as their knowledge, skills, and mindsets directly impact learning experiences and outcomes. It is therefore important to understand teacher perspectives on inclusion in order to strengthen support structures and policies.

In the Philippines, inclusion of hearing impaired (deaf & hard of hearing) students in mainstream classrooms has become an area of growing focus. Several recent studies have explored teacher views, experiences, and needs regarding inclusion hearing impaired (deaf & hard of hearing) students in elementary and secondary schools. However, more research is needed to identify gaps from the perspective of educators implementing inclusion policies. Addressing teacher needs, particularly around training and support, is vital given their influence on student experiences and outcomes.

This study aimed to contribute new insights by investigating teacher views, preparedness, and requirements regarding inclusion of hearing impaired (deaf/hard of hearing) students at three schools in the Philippines. The findings will provide valuable data to guide targeted interventions and develop action plans promoting effective inclusive education for hearing impaired (deaf & hard of hearing) students. Ultimately, this research adds a practitioner lens to existing literature to enhance teacher competencies and support inclusive efforts.

## THEORETICAL FRAMEWORK

This study is grounded in three complementary theories as well as relevant Philippine laws and policies on inclusive education (Figure 1). The social model of disability, contact theory, and theory of planned behavior provide conceptual lenses for understanding teacher perspectives as described previously.

In the Philippines, several pieces of legislation and guidelines establish a policy framework for including students with disabilities such as hearing impairments in regular classrooms. RA 11650 promotes the inclusion of learners with disabilities and their right to appropriate support services. RA 10533 emphasizes providing quality education for all learners regardless of ability. RA 9442 protects the rights of persons with disabilities to equal opportunities across life domains including education.

Department of Education policies further outline frameworks for implementing inclusive programs. DepEd Order 44 (2021) guides provision of educational services for learners with disabilities in mainstream settings. DepEd Order 21 (2021) delineates the transition curriculum to ensure a smooth pathway from elementary to secondary levels for these learners. And DepEd Memorandum 054 (2023) pilots the MATATAG Curriculum focusing on appropriate, inclusive education for learners with disabilities including those with hearing impairments.

Taken together, these theories and Philippine laws and policies present a multidimensional lens for understanding teacher viewpoints within both the local socio-political context and international theoretical frameworks. The social model, contact theory and theory of planned behavior provide conceptual validity while the policy framework enshrines the rights and guidelines for implementing inclusion in the country. This holistic approach aims to offer deeper insight into both opportunities and ongoing challenges from the practitioner perspective.

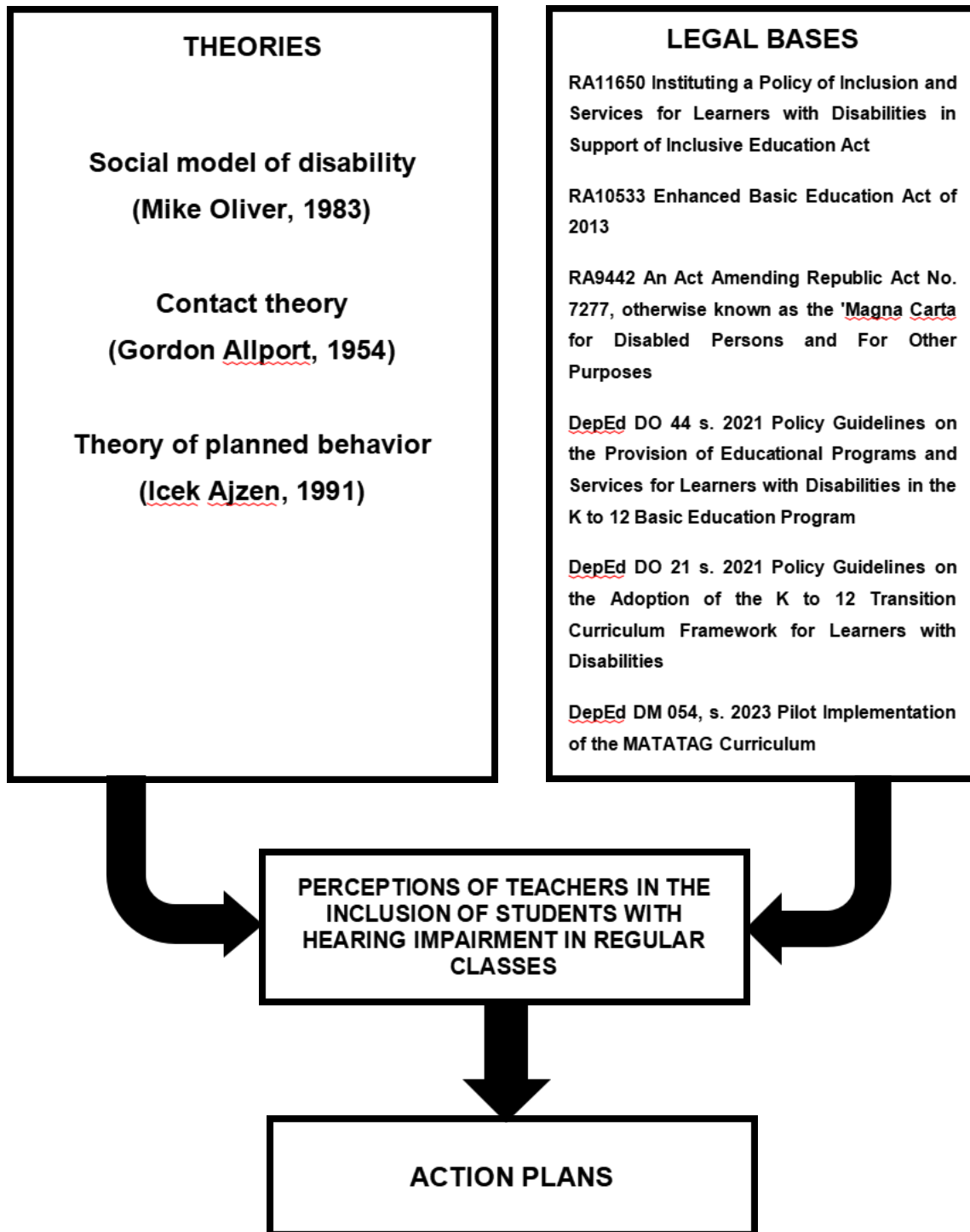


Figure 1  
Theoretical Framework



## LITERATURE REVIEW

Recent studies explored teacher perspectives on inclusion internationally, highlighting both opportunities and ongoing challenges. Across contexts, investigations found generally positive attitudes towards inclusion that could be built upon, as well as gaps in teacher preparation, support services, resources, and collaboration inhibiting success. Key themes emerging from the literature include:

**Teacher Perceptions in Various Contexts.** Several studies have investigated teacher views in diverse geographical and educational settings. Akay (2023) surveyed Turkish teachers' opinions on the inclusion of hearing-impaired students. While most felt inclusion was beneficial, many lacked confidence in their abilities and training, pointing to an important need for targeted competence development. In Latvia, Nīmante and Ekša (2020) conducted a case study of a deaf child's experiences in a mainstream primary school. Teachers utilized sign language, technology aids, and peer support strategies but required ongoing professional learning.

International research also provides insights. In India, Kiran (2020) found that despite positive attitudes, teachers faced challenges with specialized instruction methods and communication barriers. Olsson et al. (2020) surveyed Swedish elementary educators and identified impactful factors like structural adaptations, relationships, and self-efficacy that determine inclusion success. Saudi Arabian studies echo related themes. AlOtaibi et al. (2020) found generally positive attitudes but awareness gaps, while Alasim (2020) highlighted resource, training, and collaboration issues hampering programs.

In the Americas region, Nunez and Rosales (2021) profiled perceptions among Filipino high school teachers that revealed openness but constraints, including competency deficits. Paguirigan (2020) conducted a similar needs analysis to inform curriculum adaptations. Both emphasized targeted upskilling. Dela Fuente's (2021) qualitative research unpacking college instructors' experiences teaching deaf students emphasized the lack of specialized instruction preparation limiting effective support.

European context research also highlights common threads. A Hungarian study by Magyar et al. (2020) found positive views tempered by barriers like differentiated learning skill shortages. In Africa, Mumba et al.'s (2022) Zambian analysis revealed teacher and student attitudes positively correlated with academic performance when adequate provisions were made. Collectively, these international studies point to largely favorable teacher mindsets toward inclusion that can be built upon, as well as pervasive needs for customized capacity development, resources, and collaborative partnerships to actualize inclusive models. Understanding localized perspectives provides guidance for strengthening implementation supports.

**Teacher Preparation and Professional Development.** Many investigations underscored deficiencies in pre-service teacher education not adequately preparing general educators for inclusion roles. Dela Fuente (2021) found college instructors lacked specialized qualifications limiting student support. Paguirigan (2020) and Nunez and Rosales's (2021) needs analyses recommended curricular reforms at both secondary and tertiary levels to impart specialized skills and pedagogies.

Targeted in-service training also featured prominently across studies as a high-impact solution. AlOtaibi et al. (2020) and Akay (2023) called for awareness-raising and skills refresher courses. Nīmante and Ekša (2020) observed teachers improving practices through ongoing professional learning and collaboration. Kiran (2020) proposed continuous development models to update knowledge and maintain motivation over time. Some investigations proposed multi-pronged approaches.

Alasim (2020) advocated pre-service foundational preparation combined with in-service customized coaching. Mumba et al. (2022) prescribed holistic interventions, including educator capacity building, resource provisioning, and stakeholder partnership strategies. Research



consistently framed these upgrades as critical for narrowing competence gaps inhibiting inclusion success.

The study of De la Peña et al. (2023) provides valuable insights into the profile of teachers, the utilization of assistive technology, and its impact on teaching exceptional learners in public schools, which are relevant to the challenges and needs of teachers in inclusive education. They discussed teacher perceptions, preparation, professional development, and the need for resources and partnerships in inclusive education.

Addressing Resource and Partnership Needs. Resource constraints represented a cross-cutting theme. Studies highlighted shortages of specialized equipment, material support, teaching aids, and accessible infrastructure negatively impacting program delivery. Dela Fuente (2021), Paguirigan (2020), and Alasim (2020) recommended strengthening material and technological provisions. Mumba et al. (2022) emphasized fully equipping schools. Partnership development also proved consistently invaluable. Nīmante and Ekša (2020) underscored interdisciplinary cooperation between regular and special educators. Kiran (2020) advocated stakeholder collaborations, including disability organizations, parents, and communities. The latter aided access to expertise, advocacy, and social inclusion. Alasim (2020) proposed establishing framework agreements between ministries and NGOs to maximize partnership benefits.

### THE RESEARCH PROBLEM

The inclusion of hearing impaired (deaf and hard of hearing) students in mainstream classrooms is important for building inclusive education systems. While inclusion provides equal opportunities, effective implementation depended on factors like teacher attitudes and preparation. In the Philippines, deaf/hard of hearing students are increasingly included, but little is known about teacher perspectives. Understanding views and competency gaps is key to strengthening support/training.

This study addressed the lack of data on views from special and regular educators in selected Philippine schools. The central question examined whether significant differences existed between teacher groups' perceptions of inclusion. Specifically, the study aimed to: 1) Describe teacher profiles regarding age, gender, education, field and experience, 2) Assess perception levels toward deaf/hard of hearing student inclusion, and 3) Test the null hypothesis that no difference exists between special and regular teacher views.

Determining if perspectives differ could provide insights for supporting effective inclusion. Understanding profiles and perceptions may identify needs to strengthen preparation and guidance. Comparing groups may reveal disparities to target in developing action plans enhancing programs and meeting all learner needs. By exploring both groups' perceptions, insights could enhance inclusion programs to meet all students' needs.

### RESEARCH METHODOLOGY

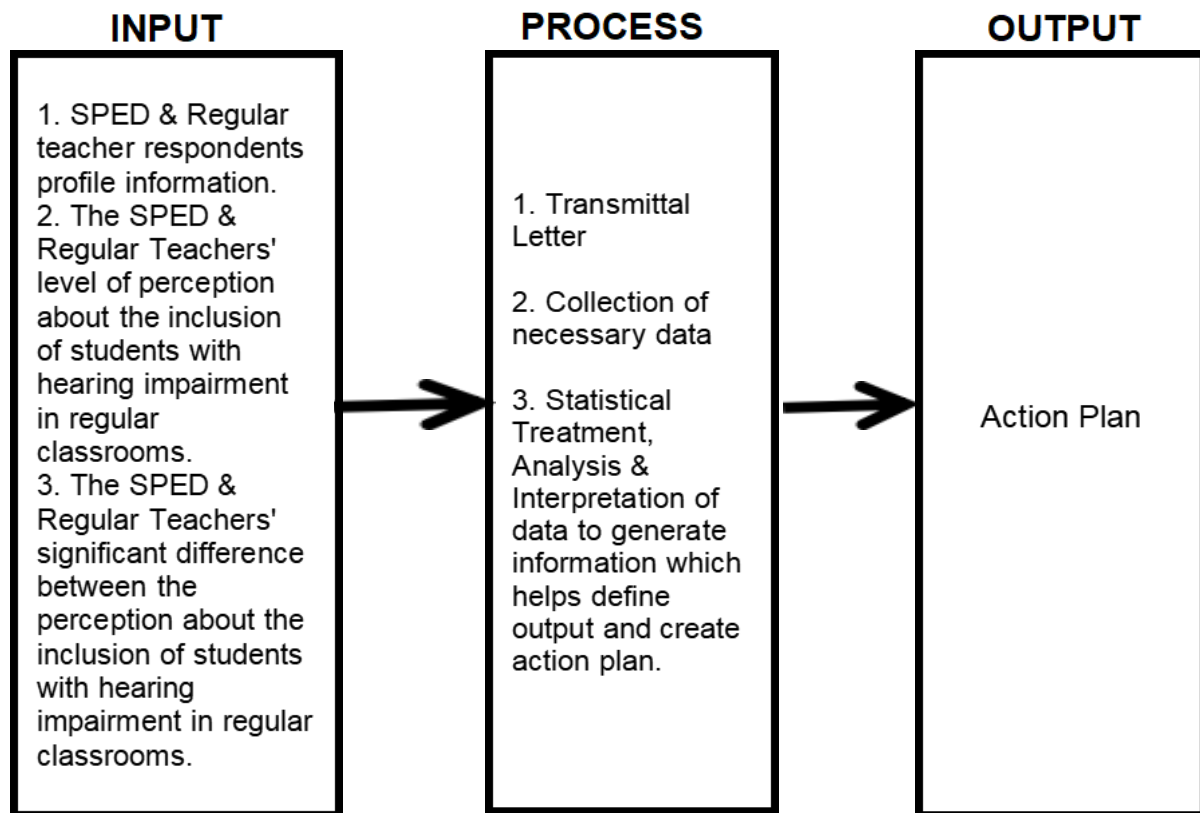
This study utilized a descriptive correlational research design to identify relationships between teacher perceptions and factors such as age, gender, education level, and years of experience. This approach allowed for exploring associations without claims of causation, as in similar previous studies on teacher views of deaf student inclusion.

Data was collected through a structured questionnaire administered to 75 teachers from three schools via stratified convenience sampling. The schools included a national high school, and two elementary schools. Within each stratum, convenience sampling was used.

The survey collected teacher demographic profiles and perceptions in two parts. Data was analyzed statistically using frequency, percentage, mean, standard deviation, Mann-Whitney U, z-score and p-values. This identified perception patterns and significant relationships.



An input-process-output model (Figure 2) guided the research efficiently. Teacher inputs underwent systematic analyses to descriptively and correlatively describe response patterns based on theoretical frameworks. Valuable outputs including support and training needs to strengthen inclusion resulted from rigorous statistical procedures applied to survey responses.



**Figure 2**  
**Flow of the Study**

**1. Data Gathering**

The researchers followed standard procedures to collect data for the study. Approval was obtained from the School Division Superintendent and principals of three schools - Jose Chona Jo Memorial National High School, Zapatera Elementary School, and Barrio Luz Elementary School. Teachers currently teaching regular or inclusion classes and willing to participate met the inclusion criteria.

A total of 75 teachers across the three schools were conveniently selected using stratified sampling, where the population was divided into strata based on school level. Surveys were administered in-person to participants adhering to COVID precautions. The questionnaire contained two parts: 1) a teacher profile section collecting demographics, and 2) questions on perceptions of including deaf/hard of hearing students. Perception questions used a 5-point Likert scale to assess areas like inclusion benefits, teaching diverse learners, time requirements, individualization, and support availability.

Data collection took place over one week through in-person survey administration. Results were then analyzed using statistical methods to identify relationships and significant findings.



## 2. Respondents

Table 1 showed the distribution of 75 teacher respondents who were selected this school year 2023-2024 from Jose Chona Jo Memorial National High School, Zapatera Elementary School, and Barrio Luz Elementary School. Selection of these teachers had to meet specific eligibility criteria, including holding a professional teaching certification, currently teaching either regular classes or inclusion/self-contained classes at one of the three schools, and volunteering to participate in the study. The researchers chose these teachers as they were the most suitable respondents for gathering data relevant to the aim and purpose of this study.

**Table 1**  
**Distribution of Respondents**

Name of Schools	N	n	%
Jose Chona Jo Memorial National High School	75	25	33.33
Zapatera Elementary School	120	25	20.83
Barrio Luz Elementary School	90	25	27.78
<b>Total</b>	<b>285</b>	<b>75</b>	<b>26.32%</b>

## 3. Research Instrument

A structured survey questionnaire was used to gather data from the respondents. The researchers adapted the survey questionnaire from "Opinion Relative to Integration of Students with Disabilities" (ORI) which was originally developed by Larrivee and Cook (1979) and revised by Atonak and Larrivee (1995). It consisted of two parts: (1) the Teacher's Profile which gathered data on the respondent's demographic information such as name, age, gender, educational attainment, years of teaching experience; and (2) questions on teachers' perceptions on the inclusion of hearing impaired (deaf and hard of hearing students).

The survey questions utilized a 5-point Likert scale with responses ranging from strongly disagree to strongly agree. It aimed to determine the teachers' perceptions on the benefits of inclusion, perceived ability to teach students with disabilities, perceived time required for inclusion, perceived ability to individualize instruction, and perceived support for inclusion.

### ETHICAL CONSIDERATIONS & DATA PRIVACY

Privacy and confidentiality were ensured through secure storage of paper/electronic data accessible only to researchers. Personal details will not be disclosed without permission. The study followed ethical standards, maintaining informed consent and participants' right to withdraw without penalty. A systematic procedure supported robust data gathering to examine teacher perspectives on inclusion.

## RESULTS

### 1. Age & Gender

Table 2 presented the age and gender distribution of the 75 special education (SpEd) and regular teacher respondents. Similarly to previous tables, the vast majority were female at 93.32% compared to only 6.66% males. Notably, the sample mostly comprised middle-aged and young female teachers between 26-49 years of age. This demographic profile offered insights into the characteristics of these teachers (Wang, 2023).



**Table 2**  
**Age and Gender of SpEd and Regular Teachers**

Age Range (years)	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
58 - 65	-	-	3	4.00	3	4.00
50 - 57	1	1.33	15	20.00	16	21.33
42 - 49	1	1.33	16	21.33	17	22.66
34 - 41	1	1.33	11	14.67	12	16.00
26 - 33	2	2.67	25	33.33	27	36.00
<b>Sub-Total</b>	<b>5</b>	<b>6.66</b>	<b>70</b>	<b>93.32</b>	<b>75</b>	<b>100.00</b>

Note: Final percentage value may slightly differ due to rounded up of decimal places.

The widespread gender imbalance in teaching stemmed from diverse interconnected influences. Intrinsically, more women may have gravitated toward the nurturing aspects of education aligned with conventional roles (Nambiar et al., 2022; Sklavaki, 2022). However, practical considerations also factored in. Qualitative research indicated women disproportionately shouldered domestic duties, inhibiting career choices (Febrianto et al., 2022).

Additionally, the largely feminine school culture and societal views of teaching as "women's work" were seen to deter male recruitment and retention over long periods (Sklavaki, 2022). Unless the underlying social and institutional barriers were addressed, this disparity appeared poised to persist with implications for students and educators. A comprehensive understanding of all contributing influences was needed to promote the increased diversity that benefited educational communities (Nambiar et al., 2022; Sklavaki, 2022; Febrianto et al., 2022).

## 2. Highest Educational Attainment

Table 3 presented the combined highest educational attainment data for the 75 special education and regular teacher respondents. Consistent with previous findings, most teachers (60%) held a postgraduate master's degree qualification. Additionally, a sizeable minority (12%) possessed doctorate degrees. No one reported currently engaging in doctorate level units. This educational profile paralleled individual distributions and indicates advanced training as a norm among the teaching sample.

Standards for special education teachers had markedly increased over the past decades. Research by Theobald et al. (2021:2020) linked higher qualification levels like a minimum master's degree with improved student outcomes, highlighting its importance given the complex needs taught. While many obtain requisite master's training, restricted opportunities for doctoral study had been noted which could foster leadership and innovation within the field. Likewise, regular educators increasingly attain graduate credentials potentially related to salary incentives, subject specialization needs or rising standards. Overall, supporting access to advanced education benefits teachers and students alike through a highly skilled, research-informed workforce.

**Table 3**  
**Highest Educational Attainment of SpEd and Regular Teachers**

Educational Attainment	Freq.	%
Doctorate degree	9	12.00
Master's Units	10	13.33
Master's degree	45	60.00
Bachelor's degree	11	14.67
<b>Sub-Total</b>	<b>75</b>	<b>100.00</b>

Note: Final percentage value may slightly differ due to rounded up of decimal places.

Over one-third of the workforce had extensive experience over 16 years. However, similar to previous tables, the 11-15 years group was comparatively smaller. The 6-10 years and 1-5 years





cohorts had close representation. Overall, the profile indicated an experienced combined teaching sample. However, it maintained the pattern of relatively fewer teachers in the mid-career phase. This consistent trend across samples raised questions about past staffing and turnover in the mid-level experience bracket.

Teacher experience and retention were crucial for positive student outcomes. Goldhaber et al. (2020) showed that experienced teachers tended to be more effective educators. As teachers spent more time in the classroom, they gained valuable expertise that benefitted their students. With each year of experience, educators increased their content and pedagogical knowledge through both practice and ongoing professional learning (Vaish & Lin 2020).

Experienced teachers were more familiar with how to design and scaffold lessons, engage diverse learners, and draw on recent educational research (Vaish & Lin 2020). They also had a deeper understanding of child development that allowed for more nuanced support of students. By participating in professional growth opportunities over many years, teachers continued expanding their teaching skills and strategies. When districts could retain educators long-term, students fully reaped the rewards of being taught by teachers with meaningful classroom experience.

### 3. Level Of Perception Of The Respondent-Groups Towards Inclusion Of Hearing Impaired (Deaf & Hard Of Hearing) Students In Regular Classrooms

Tables 4A & 4B presented data on special education and regular teachers' perceptions of including hearing impaired students in regular classrooms. Across indicators surveyed, perceptions were categorized as mixed or uncertain overall.

**Table 4A**  
**Level of Perception of SpEd and Regular Teachers towards inclusion of Hearing Impaired (Deaf and Hard of Hearing) Students in Regular Classroom**

No.	Indicators	$\bar{x}$	VD
1	Most deaf and hard of hearing students will make an adequate attempt to complete their assignments.	3.91	A
2	Inclusion of deaf and hard of hearing students will necessitate extensive retraining of general-classroom teachers.	4.24	SA
3	Inclusion offers mixed group interaction that will foster understanding and acceptance of differences among students	4.13	A
4	It is likely that the deaf and hard of hearing students will exhibit behavior problems in a regular classroom.	3.04	U
5	Deaf and hard of hearing students can best be served in a regular classroom.	2.99	U
6	The extra attention deaf and hard of hearing students require will be to the detriment of the other students.	2.83	U
7	The challenge of being in a regular classroom will promote the academic growth of the deaf and hard of hearing students.	3.61	A
8	Inclusion of deaf and hard of hearing students will require significant changes in regular classroom procedures.	4.03	A
9	Increased freedom in a regular classroom creates too much confusion for the deaf and hard of hearing students.	3.25	U
10	General-classroom teachers have the abilities necessary to work with deaf and hard of hearing students.	3.45	A
11	The presence of deaf and hard of hearing students in a regular classroom will promote acceptance of differences on the part of students without disabilities.	4.17	A
12	The behavior of deaf and hard of hearing students will set a bad example for students without disabilities	1.79	SD
13	Deaf and hard of hearing students will probably develop academic skills more rapidly in a regular classroom than in a special school.	2.88	U

**Aggregate Mean 3.41 A**

Legend: 4.20 - 5.00 Strong Agree (SA); 3.40 - 4.19 Agree (A); 2.60 -3.39 Undecided (U); 1.80 - 2.59 Disagree (D); 1.00 - 1.79 Strongly Disagree (SD)



In Table 4A, the aggregate mean of 3.41 indicated agreement with inclusion's benefits like fostering acceptance and needing training. However, over half of indicators addressing behavioral implications and academic impacts fell under the "Undecided" range. Similarly in Table 5B, while social aspects gained some "Agree" ratings, the overall/aggregate means of 3.38/3.35 classified views as "Undecided." Over 70% of indicators pertaining to classroom dynamics lacked consensus.

Areas of ambiguity reflected information gaps rather than opposition. Addressing teacher perceptions was critical for inclusion success. The mixed findings signal a need for focused support targeting practical classroom strategies, resources, and ongoing expert guidance tailored to each teacher group's needs. With informed training addressing reservations, uncertainty could transition to stronger endorsement as inclusive practices prove workable. Adopting partnership solutions respecting both goals of access and educator viewpoints gave opportunity for hearing impaired students' rights to be actively upheld through collaborative means. Providing appropriate training and resources within structured frameworks of guidance and assistance aimed to build understanding and capacity, thereby positively impacting the experiences of all students and teachers involved in inclusion efforts over time.

**Table 4B**  
**Level of Perception of SpEd and Regular Teachers towards inclusion of Hearing Impaired (Deaf and Hard of Hearing) Students in Regular Classroom**

No.	Indicators	$\bar{x}$	VD
14	Inclusion of the deaf and hard of hearing students will promote his or her social independence.	3.92	A
15	It is not more difficult to maintain order in a regular classroom that contains a deaf or hard of hearing student than in one that does not contain a deaf and hard of hearing student.	3.16	U
16	Deaf and hard of hearing students will not monopolize the regular classroom teacher's time	3.32	U
17	The inclusion of deaf and hard of hearing students can be beneficial for students without disabilities.	3.40	A
18	Deaf and hard of hearing students are likely to create confusion in a regular classroom.	2.77	U
19	Regular classroom teachers have sufficient training to teach deaf and hard of hearing students	2.83	U
20	Inclusion will likely have a negative effect on the emotional development of the deaf and hard of hearing students.	2.61	U
21	Deaf and hard of hearing students are given every opportunity to function in a regular classroom when possible.	3.80	A
22	The classroom behavior of the deaf and hard of hearing students do not generally require more patience from the teacher than does the classroom behavior of the student without a disability.	2.73	U
23	Teaching deaf and hard of hearing students is better done by special education teachers instead of general classroom teachers.	4.00	A
24	Inclusion on a regular classroom has a beneficial effect on the social and emotional development of the deaf and hard of hearing students	3.93	A
25	The deaf and hard of hearing students will not be socially isolated in a regular classroom	3.71	A
<b>Aggregate Mean</b>		<b>3.35</b>	<b>U</b>
<b>Overall Mean</b>		<b>3.38</b>	<b>U</b>

Legend: 4.20 - 5.00 Strong Agree (SA); 3.40 - 4.19 Agree (A); 2.60 - 3.39 Undecided (U); 1.80 - 2.59 Disagree (D); 1.00 - 1.79 Strongly Disagree (SD)

Table 4B showed ratings by SpEd and regular teachers on 25 inclusion indicators, with aggregate/overall means. The overall and aggregate means were 3.38 and 3.35, categorized as



"Undecided". A few indicators relating to social aspects gained "Agree" ratings above 3.40. However, over 70% of indicators addressing classroom implications fell under "Undecided" between 2.60-3.39.

While social benefits are acknowledged, perceptions remain uncertain overall. Teachers lack consensus around inclusion's practical dimensions in class. Areas of ambiguity like classroom management, time/training demands reflect information gaps. More targeted capacity building may be needed to address reservations. With adequate support models, uncertainty could translate to stronger endorsement over time.

We, the researchers, believed that the mixed and uncertain perceptions highlight the need for focused partnership approaches between teacher groups to optimize inclusive practices and gain definitive acceptance of inclusion. The data suggested that while social benefits are acknowledged, perceptions remain uncertain overall. Teachers lacked consensus around inclusion's practical dimensions in class. The literature supported the importance of addressing teacher perceptions and providing targeted training and support to build clarity and comfort around inclusive practices (Jackson, 2021).

The National Association of the Deaf emphasized the need for appropriate provision of teacher support to positively impact the experience of teachers and students who are deaf or hard of hearing (Silvestri & Hartman, 2022). Kunz et al. (2021) had found that provision of support to teachers of students with disabilities improves teacher attitude and perception of effectiveness. Kelly et al. (2022) provided strategies emphasizes the need to upskill teachers in fostering a caring, understanding, and supportive relationship with deaf learners. Catalano (2020) provided strategies for teaching students who are deaf or hard of hearing, emphasizing the importance of creating an inclusive and supportive classroom environment.

#### 4. Test Of Significance On The Difference Between The Perceptions Of Sped & Regular Teachers

Table 6 presented results from the Mann-Whitney U test comparing perceptions of special education and regular teachers towards including hearing impaired students. While mean ranks were slightly higher for special educators, the difference was not statistically significant based on the z-score, U-value and p-value exceeding the 0.05 level of significance. Therefore, the null hypothesis that perceptions do not differ between the two teacher populations could not be rejected. This statistical analysis indicated perceptions towards inclusion were comparable on average between special education and regular teachers. The lack of statistically significant differences suggests openness from both populations to improving inclusive practices through informed guidance. With targeted training empowering effective strategies, perceptions may strengthen further over time as positive experiences accumulate.

**Table 5**  
**Test of Significance on the Difference between the Perceptions of SpEd and Regular Teachers towards Inclusion of Hearing Impaired (Deaf and Hard of Hearing) Students in Regular Classrooms**

Variable in Comparison	Mean of Ranks	z-score	Comp. U-value	p-value	Result	Decision
SpEd Teachers' Perception	27.52				The observed data is not statistically significant at 0.05 level	There is not enough evidence to reject the null hypo-thesis
Versus		0.97014	262	0.33204		
Regular Teachers Perception	23.48					

Note: Tested at 0.05 level of significance



Such findings resonated with prior research (Scherer et al., 2023; Alanazi, 2021) demonstrating deaf and hard of hearing students experience communication barriers in mainstream settings due to limited awareness of their needs, and a lack of consensus on the most effective inclusive practices. Overall, the results suggested both teacher groups could benefit from comparable training and support to build clarity and knowledge around effectively including deaf learners. Acknowledging shared needs presents an opportunity for collaborative professional development models informed by each specialization. With targeted guidance empowering inclusive practices, perceptions have potential to strengthen endorsement of accessibility for deaf students across educational environments over time.

It is encouraging that pre-existing attitudinal barriers do not appear to divide teacher viewpoints based on specialization; this common ground serves as fertile soil for cultivating strengthened endorsement of inclusion through cooperative learning models. However, the findings also call for nuanced and customized support that goes beyond broad measures to equip educators with practical skills. Acknowledging shared uncertainties presents opportunity to cultivate shared solutions through engagement of all stakeholders. Moving forward, collaboratively developing contextualized best practices informed by local insights could help optimize inclusive education for deaf students through a unified framework empowering multi-disciplinary teams.

## CONCLUSION

This study explored special education (SPED) and regular teachers' perceptions regarding inclusion of hearing impaired (deaf and hard of hearing) students in mainstream classrooms in Cebu, Philippines. A quantitative survey design collected demographic data and perception ratings from 75 teachers across three schools. Descriptive and inferential statistics systematically analyzed the results.

Perceptions were generally positive towards inclusion's potential social-academic benefits for all learners (Scherer et al., 2023; Pérez-Jorge et al., 2021). However, both SPED and regular teachers expressed uncertainties around implications for practical classroom management and differentiation of needs (Mihajlovic, 2020; Jackson, 2021). While SPED teachers viewed inclusion slightly more favorably, the Mann-Whitney U test found no statistically significant difference in perceptions between the groups (Scherer et al., 2023; Alanazi, 2021).

These findings suggested both teacher populations could mutually benefit from tailored training to strengthen understanding of accessibility best practices for deaf students, as acknowledging shared preparation needs allows collaborative professional development models (Kunz et al., 2021; Catalano, 2020). With targeted guidance empowering inclusion competence over time, perceptions have potential to foster stronger endorsement of practices across environments (Theobald, 2022; Kelly et al., 2022).

A matrix-based action plan was recommended to optimize inclusive deaf education through professional growth opportunities, resources and support networks. Targeted training modules aim to address competency gaps interactively (NAD, 2022; Silvestri & Hartman, 2022). Guidance materials, virtual communities and directories cultivate peer learning (Mihajlovic, 2020). Establishing communities of practice and conducting needs assessments ensure responsiveness.


Joint credentialing and disability awareness programs foster cross-specialization collaboration (Pérez-Jorge et al., 2021). Engaging families and advocating policy strengthen partnerships and accountability (Jackson, 2021). Regular monitoring and evaluation of capacities and environments can help iteratively strengthen inclusion over time for diverse learner success (Theobald, 2022; Kelly et al., 2022). With appropriate scaffolding acknowledging shared preparation needs, perceptions among educators have potential to evolve into firmer endorsement of accessibility for all.

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