INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

From Readiness to Practice: Teachers' Challenges in Utilizing Assistive Technology to Support Diverse Learners

DOI: 10.5281/zenodo.23679639

ALLIAH LYNN C. DALANON
Master of Arts in Education, Major in Special Education
CEBU TECHNOLOGICAL UNIVERSITY
Main Campus, R. Palma Street, Cebu, Philippines
Email: dalanonalliah@gmail.com

Abstract

This study examined teachers' experiences from readiness to practice in utilizing assistive technology to support diverse learners at Ormoc City SPED Integrated School during School Year 2026–2027. Specifically, it explored teachers' readiness, utilization practices, challenges and their influence on instruction, school administrative support, and additional support needs. A qualitative phenomenological research design was employed. The study was conducted at Ormoc City SPED Integrated School, where teachers handled learners with disabilities and utilized assistive technology. Seven teachers were selected through purposive sampling based on their direct experience teaching learners with disabilities and using assistive technology. A researcher-made semi-structured interview guide consisting of open-ended questions was used. No statistical tools were used; instead, thematic analysis was employed through transcription, identification of significant statements, coding, categorization, and theme development. Findings revealed that teachers developed readiness through training, experience, self-exploration, continuous practice, and adaptation to diverse learner needs. They utilized assistive technology by matching tools with learner needs and instructional objectives, using visual and multimodal supports, and monitoring and adjusting instruction. Challenges included limited resources, technical difficulties, inaccessible materials, and preparation demands, which encouraged instructional adaptation and resourcefulness. Administrative support included training, resources, facilities, and encouragement, although gaps remained in specialized services, updated devices, connectivity, and technical support. The study concluded that effective assistive technology use required continuous learning, adaptability, and sustained support. An Action Plan was recommended to strengthen training, resources, technical assistance, and collaboration among teachers and administrators for inclusive classroom practice.

Keywords: Special Education, assistive technology, teacher readiness, qualitative phenomenological research, Ormoc City SPED Integrated School

Introduction

The integration of assistive technology has become increasingly important in promoting inclusive education and reducing barriers experienced by learners with disabilities. Internationally, assistive technology provides alternative means for learners to access information, communicate, participate in classroom activities, and demonstrate learning. Rose and Meyer (2002), through the Universal Design for Learning framework, emphasized the importance of providing flexible ways for learners to access and engage with instruction because learners differ in their abilities and ways of learning. Similarly, Mishra and Koehler (2006) highlighted that effective technology integration requires teachers to combine technological knowledge with pedagogical and content knowledge. These perspectives indicate that the effectiveness of assistive technology depends not only on the availability of technological tools but also on teachers' capacity to use them appropriately in responding to learner diversity.

In the Philippine context, inclusive education and the provision of appropriate support for learners with disabilities are reinforced through national policies. Republic Act No. 7277, as amended, provides protection and support for persons with disabilities, while Republic Act No. 10533 established a learner-centered K to 12 Basic Education Program. More specifically, Republic Act No. 11650 institutionalized a policy of inclusion and services for learners

with disabilities and provided for the establishment of Inclusive Learning Resource Centers. These policies establish the responsibility of educational institutions to provide appropriate support and accessible learning opportunities. However, the implementation of these policies requires teachers to possess the knowledge and skills necessary to select, adapt, and utilize assistive technology according to the individual needs of learners.

Philippine studies have documented the benefits and challenges associated with technology and assistive technology in inclusive education. Quiño-Justol (2024) found that teachers recognized the importance and benefits of assistive technology but also identified challenges and the need for social support in its integration. González and Estrella (2023) likewise emphasized the relationship between inclusive education policy and the practical implementation of assistive technology in Philippine educational settings. Sanchez (2025) reported that assistive technology could help bridge learning gaps among learners in special needs and inclusive education settings, while Quirao et al. (2025) identified challenges related to technology utilization in inclusive classrooms. These studies demonstrate that assistive technology has considerable potential to support diverse learners, but its classroom use remains affected by teachers' preparedness, available resources, and the conditions in which technology is implemented.

At the local level, Ormoc City SPED Integrated School provides a meaningful context for examining these concerns because teachers work directly with learners who have varied disabilities and learning needs. Teachers utilize different assistive technologies and technology-supported resources, including visual materials, communication tools, digital devices, videos, presentations, Braillers, and other instructional supports. However, the experiences of teachers also involve limitations in resources, technical difficulties, connectivity problems, preparation time, and the need to continuously modify materials and strategies according to individual learners. These conditions suggest that the actual integration of assistive technology involves continuous decision-making and adjustment rather than simply having access to technological tools.

Despite the growing body of literature on assistive technology, a clear research gap remains. Existing studies have largely focused on the benefits, perceptions, level of utilization, policy implementation, and general challenges associated with technology in inclusive education (González & Estrella, 2023; Quiño-Justol, 2024; Quirao et al., 2025; Sanchez, 2025). What remains insufficiently explored is how teachers themselves experience the process of moving from readiness to actual practice, including how they develop confidence, select and adapt assistive technology, respond to unsuccessful applications, and adjust their instructional practices when resources or technology are inadequate. In particular, there is limited qualitative evidence describing the lived experiences of teachers in a SPED school as they navigate the practical challenges of integrating assistive technology according to the diverse needs of learners with disabilities.

This gap is important because the integration of assistive technology occurs within a broader environment involving teachers, learners, school administrators, resources, and institutional support. Bronfenbrenner's (1979) ecological perspective recognizes that human experiences and practices are influenced by interacting environmental systems, while Rogers' (2003) Diffusion of Innovations theory explains that the adoption of an innovation is influenced by users' experiences, perceptions, support, and the conditions surrounding its implementation. These perspectives provide a basis for examining assistive technology integration as an experiential and contextual process. Understanding teachers' lived experiences can therefore provide insights that may not be fully captured through quantitative measures of perception or utilization alone.

In view of this gap, the study examined teachers' experiences from readiness to practice in utilizing assistive technology to support diverse learners at Ormoc City SPED Integrated School during the School Year 2026–2027. Specifically, it sought to describe teachers' readiness to integrate assistive technology in teaching learners with disabilities, examine how they utilized assistive technology during classroom instruction, identify the challenges they experienced and how these influenced their instructional practices, explore the support provided by school administration, and determine the additional support needed to strengthen their use of assistive technology.

Theoretical and Conceptual Framework

This study was anchored on relevant theoretical and legal foundations that provided a basis for understanding teachers' experiences in utilizing assistive technology to support diverse learners. The Technology Acceptance Model,

Universal Design for Learning, and Diffusion of Innovations Theory provided perspectives on teachers' readiness, utilization, adaptation, and adoption of assistive technology in classroom instruction. These theories guided the examination of how teachers developed confidence, selected appropriate tools, adapted instruction, and responded to challenges in actual practice.

The study was also supported by legal foundations that recognized the rights of learners with disabilities to inclusive and accessible education. Republic Act No. 11650, or the Inclusive Education Act of 2022, Republic Act No. 7277, as amended by Republic Act No. 9442, or the Magna Carta for Persons with Disability, and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) provided the legal basis for promoting accessibility, participation, and appropriate educational support for learners with disabilities. Together, these theoretical and legal foundations guided the interpretation of teachers' readiness, utilization practices, challenges, administrative support, and additional support needs in integrating assistive technology.

Technology Acceptance Model

The Technology Acceptance Model of Fred Davis (1989) explains how individuals develop an intention to use technology based primarily on perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which an individual believes that using a particular technology will improve performance, while perceived ease of use refers to the extent to which the individual believes that the technology can be used with minimal effort. In the context of this study, the model provides a basis for understanding teachers' readiness to utilize assistive technology in supporting learners with disabilities. This perspective is consistent with Republic Act No. 11650, or the Inclusive Education Act of 2022, which recognizes the need to provide appropriate support and services for learners with disabilities within an inclusive education system. Teachers may be more willing to use assistive technology when they recognize its usefulness in improving learners' participation, communication, understanding, and independence and when they feel capable of using available tools. Conversely, limited familiarity, insufficient training, technical difficulties, and lack of confidence may affect teachers' readiness and willingness to utilize assistive technology in classroom instruction.

The model is particularly relevant to the study because teachers' readiness is reflected not only in their willingness to use assistive technology but also in their developing confidence and ability to determine whether a particular tool is appropriate for a learner and an instructional purpose. Teachers may become more confident as they gain experience, explore different tools, receive training, and observe how learners respond to assistive technology. This is aligned with Republic Act No. 7277, as amended by Republic Act No. 9442, or the Magna Carta for Persons with Disability, which recognizes the rights of persons with disabilities to education and appropriate support. Thus, the Technology Acceptance Model provides a perspective for understanding how teachers' perceptions of usefulness and ease of use may be reflected in their experiences as they move from readiness to actual classroom practice (Davis, 1989).

Universal Design for Learning

Furthermore, Universal Design for Learning (Rose & Meyer, 2002) provides a framework for understanding how teachers can utilize assistive technology to respond to learner variability. The framework recognizes that learners differ in how they engage with instruction, access information, and demonstrate what they know. It therefore emphasizes the provision of multiple means of engagement, representation, and action and expression. In this study, UDL is relevant to teachers' utilization of assistive technology because the participants described selecting visual materials, communication tools, digital resources, audio materials, tactile resources, and other supports according to the individual needs and abilities of their learners. This principle is consistent with Republic Act No. 11650, which promotes inclusive education and appropriate educational support for learners with disabilities.

The UDL framework also supports the examination of how teachers adapt instruction when assistive technology does not work as expected or when available resources do not adequately address learner needs. Teachers may modify materials, provide alternative formats, combine technology with hands-on activities, or use non-technological resources when necessary. These practices reflect the principle of providing appropriate accommodations and support recognized in Republic Act No. 7277, as amended by Republic Act No. 9442. They are also consistent with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), which emphasizes the right of persons with disabilities to inclusive and quality education and the provision of appropriate support to facilitate effective

education. Thus, UDL provides a basis for understanding how teachers use assistive technology as part of flexible and responsive instructional practices rather than as a stand-alone solution to learner differences (Rose & Meyer, 2002).

Diffusion of Innovations Theory

Additionally, the Diffusion of Innovations Theory of Rogers (2003) explains how an innovation is introduced, accepted, adapted, and sustained within a social system. The theory identifies factors such as relative advantage, compatibility, complexity, trialability, and observability that influence the adoption of an innovation. In the context of this study, assistive technology may be viewed as an instructional innovation that teachers gradually learn, explore, evaluate, and integrate into their classroom practices. Teachers may determine whether a particular device or digital tool is useful, appropriate to their learners, manageable to operate, and compatible with their instructional objectives based on their actual experiences with the technology. This process of adoption supports the implementation of Republic Act No. 11650, which requires educational systems to provide appropriate services and support for learners with disabilities.

The theory is also relevant to the study's examination of challenges and administrative support. Teachers' experiences with technical difficulties, limited resources, lack of training, and inadequate access to appropriate devices may influence how consistently assistive technology is utilized. At the same time, training opportunities, peer support, access to resources, and encouragement from school administrators may facilitate continued use and adaptation of assistive technology. These conditions are relevant to the implementation of Republic Act No. 7277, as amended by Republic Act No. 9442, which emphasizes the rights and educational needs of persons with disabilities. They also reflect the UNCRPD's emphasis on providing appropriate support and reasonable accommodations that enable persons with disabilities to participate fully in education. Diffusion of Innovations Theory therefore provides a basis for understanding how teachers move from initial exposure and readiness toward actual and sustained utilization of assistive technology in classroom instruction (Rogers, 2003).

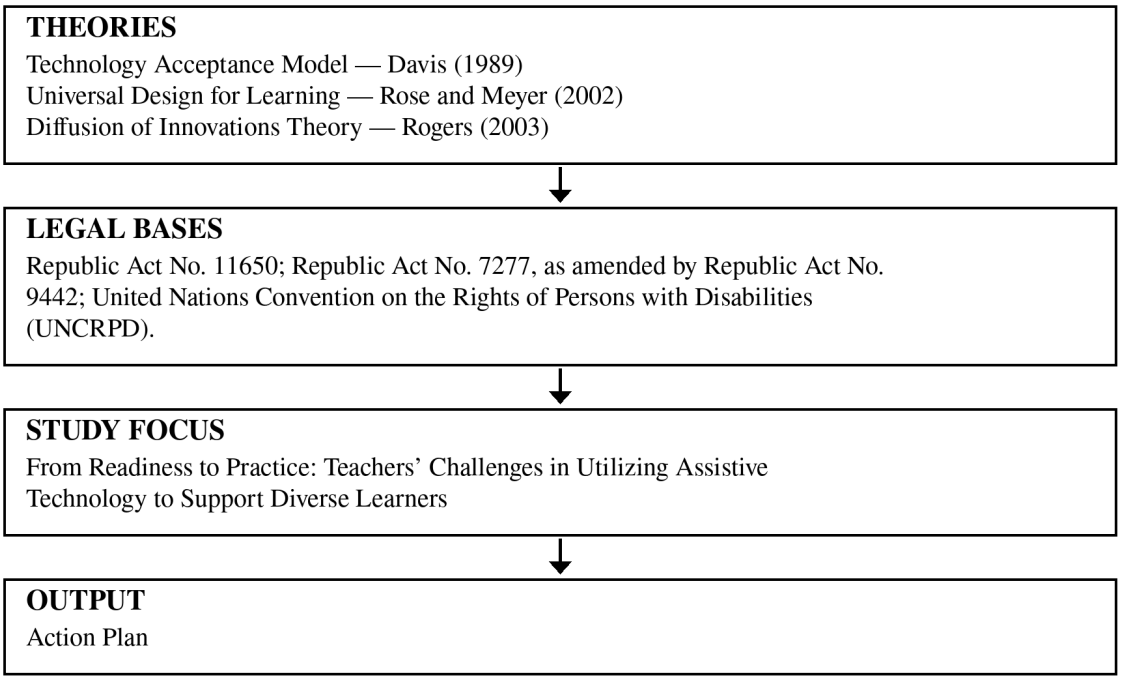


Figure 1

Theoretical and Conceptual Framework of the Study

Legal Bases

The legal foundations of the study further establish the responsibility of educational institutions to promote accessible and inclusive learning opportunities. Republic Act No. 11650, or the Inclusive Education Act of 2022, provides for

an inclusive education system and appropriate support and services for learners with disabilities. Republic Act No. 7277, as amended by Republic Act No. 9442, or the Magna Carta for Persons with Disability, recognizes the rights of persons with disabilities, including their right to education and appropriate support. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) likewise emphasizes the right of persons with disabilities to inclusive and quality education without discrimination. Together, these legal bases provide a foundation for examining teachers' experiences in utilizing assistive technology, particularly in relation to learner accessibility, instructional accommodations, school support, and the availability of appropriate resources.

The implementation of assistive technology, however, requires more than the availability of legal mandates and technological resources. Teachers need appropriate training, practical experience, accessible materials, technical assistance, and institutional support to utilize assistive technology effectively. Campado et al. (2023) reported that teachers encountered challenges related to technological difficulties, limited resources, funding, and their level of mastery of assistive technology when integrating it into instruction. These concerns are consistent with the experiences examined in the present study, particularly the challenges related to limited devices, connectivity problems, preparation of accessible materials, and the need for continuous professional and technical support. The legal provisions therefore provide the broader institutional context within which teachers' readiness, utilization, challenges, and support needs can be understood.

Taken together, the Technology Acceptance Model, Universal Design for Learning, and Diffusion of Innovations Theory provide complementary perspectives for examining teachers' experiences from readiness to practice in utilizing assistive technology. The Technology Acceptance Model provides a basis for understanding teachers' readiness and confidence, UDL explains how assistive technology can be utilized and adapted to address learner variability, while Diffusion of Innovations Theory explains how teachers adopt, modify, and sustain the use of assistive technology within their instructional and school contexts. Republic Act No. 11650, Republic Act No. 7277 as amended by Republic Act No. 9442, and the UNCRPD provide the legal foundation for ensuring that learners with disabilities receive inclusive, accessible, and appropriate educational support. Together, these theoretical and legal foundations guided the study in examining teachers' readiness, utilization practices, challenges and instructional responses, school administrative support, and additional support needed to strengthen the use of assistive technology in supporting diverse learners.

The Problem

Statement of the Problem

This study determined the teachers' experiences from readiness to practice in utilizing assistive technology to support diverse learners at Ormoc City SPED Integrated School during the School Year 2026–2027.

Specifically, it sought to answer the following queries:

1. How do teachers describe their readiness to integrate assistive technology in teaching learners with disabilities?
2. How do teachers utilize assistive technology during classroom instruction?
3. What challenges do teachers experience in integrating assistive technology for learners with disabilities, and how do these challenges influence their instructional practices?
4. How does school administration support teachers in addressing the challenges of integrating assistive technology for learners with disabilities?
5. What additional support do teachers need to strengthen their use of assistive technology in supporting diverse learners?
6. Based on the findings, what Action Plan can be proposed?

Methodology

Research Design

This study employed a qualitative descriptive research design to examine teachers' challenges in utilizing assistive technology to support diverse learners. The design was appropriate because the study sought to obtain a detailed description of teachers' experiences, practices, challenges, and support needs based on their own accounts and

perspectives. It enabled the researcher to examine how teachers described their readiness to integrate assistive technology, how they utilized it during classroom instruction, how challenges influenced their instructional practices, how school administration provided support, and what additional support teachers needed to strengthen their use of assistive technology.

Nistal Anta et al. (2024) emphasized the importance of understanding teachers' competencies and the conditions that support the inclusion of learners with special educational needs. Consistent with this perspective, the qualitative descriptive design allowed the present study to examine teachers' experiences directly and describe the conditions, practices, challenges, and forms of support associated with their use of assistive technology. The design therefore provided an appropriate approach for presenting the participants' accounts in a manner that remained closely grounded in their actual experiences and responses.

Input–Process–Output Model

Input. The input of the study consisted of the relevant information gathered from the seven participants and the five major areas of inquiry that guided the examination of teachers' experiences from readiness to practice in utilizing assistive technology to support diverse learners. The profile of the participants provided the contextual background for understanding their experiences, while the five areas of inquiry focused on their readiness, classroom utilization, challenges, administrative support, and additional support needs. Together, these inputs provided a comprehensive basis for understanding how teachers developed their readiness, applied assistive technology in actual instruction, responded to challenges, and identified the support necessary to strengthen its use.

The study process comprised permission through a transmittal letter, semi-structured interviews, collection and documentation of interview responses, transcription, coding and categorization, thematic interpretation, and presentation of findings. The output was an Action Plan based on identified readiness, utilization, instructional adaptation, administrative support, and resource needs.

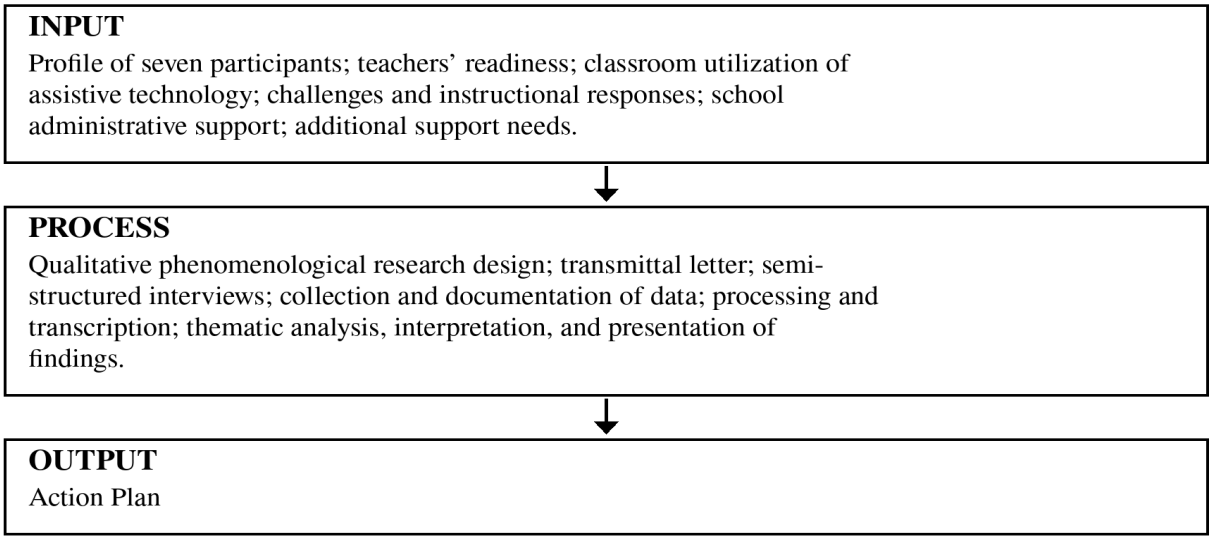


Figure 2
Flow of the Study

Research Environment

Ormoc City SPED Integrated School was considered an appropriate research environment because it provided a setting where teachers regularly worked with learners with diverse disabilities and utilized assistive technology and other instructional resources to address their individual learning needs. The school's focus on special and inclusive education allowed the researcher to examine teachers' experiences in an actual context where assistive technology was integrated into classroom instruction. This environment provided relevant conditions for exploring teachers'

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

readiness, utilization practices, challenges, administrative support, and additional support needs in using assistive technology to support diverse learners.



Figure 3
Location Map and School Photograph of the Research Environment
Participants and Sampling

The participants of this study were teachers from Ormoc City SPED Integrated School who had direct experience in teaching learners with disabilities and utilizing assistive technology in classroom instruction. The study included seven participants whose experiences provided relevant information regarding their readiness to integrate assistive technology, actual utilization during instruction, challenges encountered, administrative support, and additional support needed. The participants represented varied teaching experiences and classroom contexts, including teachers handling learners with developmental disabilities, hearing impairments, visual impairments, autism, attention-related needs, and other diverse learning needs. Their varied experiences provided a range of perspectives on the use of assistive technology in supporting learners with disabilities.

Purposive sampling was used in selecting the participants. This sampling technique was appropriate because the study required teachers who possessed specific experiences and knowledge relevant to the phenomenon being investigated. The participants were intentionally selected based on their direct involvement in teaching learners with disabilities and their experience in using assistive technology or technology-supported instructional resources. Their firsthand experiences enabled them to provide detailed descriptions of their readiness, classroom practices, challenges, and support needs.

The inclusion criteria required that participants were teachers of Ormoc City SPED Integrated School during the School Year 2026–2027, had direct teaching experience with learners with disabilities, had experience using assistive technology or technology-supported instructional resources in their teaching, and were willing to participate in the semi-structured interview. Participants also needed to be capable of describing their experiences, practices, challenges, and support needs related to the integration of assistive technology.

The exclusion criteria included teachers who did not have direct teaching experience with learners with disabilities, teachers who had no experience utilizing assistive technology or technology-supported instructional resources, teachers who were not assigned to Ormoc City SPED Integrated School during the School Year 2026–2027, and individuals who were not willing or available to participate in the interview. These criteria ensured that the participants had direct and relevant experiences that could contribute meaningful information to the objectives of the study.

Research Instrument
The research instrument used in this study was a researcher-made semi-structured interview guide designed to gather in-depth information about the teachers' experiences in utilizing assistive technology to support diverse learners. The interview guide was developed based on the objectives of the study and the five areas of inquiry, namely: teachers'

readiness to integrate assistive technology in teaching learners with disabilities; utilization of assistive technology during classroom instruction; challenges encountered in integrating assistive technology and their influence on instructional practices; school administrative support in addressing these challenges; and additional support needed to strengthen the use of assistive technology in supporting diverse learners.

The interview guide consisted of open-ended questions that allowed the participants to describe their experiences, practices, perceptions, challenges, and support needs in their own words. The questions were structured to encourage participants to provide detailed accounts of their experiences rather than limiting their responses to predetermined choices. Follow-up and probing questions were also used when necessary to clarify responses and obtain more detailed descriptions relevant to the areas of inquiry.

The first part of the interview guide focused on the participants' experiences in teaching learners with disabilities and their readiness to use assistive technology. It explored how they learned to use assistive technology, the sources of their knowledge and skills, and their confidence in using different assistive technologies. The second part examined how teachers utilized assistive technology during classroom instruction, including how they selected appropriate tools, introduced them to learners, and integrated them into learning activities.

The third part focused on the challenges encountered in integrating assistive technology and how these challenges influenced instructional practices. The questions explored concerns related to resources, technical difficulties, accessibility of materials, preparation time, learner differences, and the adjustments teachers made in response to these challenges. The fourth part examined school administrative support, including training opportunities, access to assistive devices and instructional resources, learning resource facilities, technical assistance, and other forms of institutional support. The fifth part explored the additional support needed by teachers, particularly in terms of professional development, updated assistive technology, accessible instructional materials, reliable technical resources, continuous technical assistance, collaboration, and teacher involvement in decisions concerning assistive technology.
Before the conduct of the interviews, the interview guide was reviewed to ensure that the questions were clear, relevant, and aligned with the objectives and areas of inquiry of the study. The researcher also ensured that the questions were appropriate for eliciting participants' firsthand experiences. During the interviews, the researcher established a comfortable environment, obtained informed consent, maintained confidentiality, and allowed participants to express their experiences freely. The responses were documented and subsequently analyzed using thematic analysis to identify significant statements, initial codes, categories, and emerging themes.

Data Collection
Preliminary Stage. The study began with the researcher securing formal approval from the administration of Ormoc City SPED Integrated School through the submission of a transmittal letter. Upon approval, coordination was established with the school administration to identify teachers who met the inclusion criteria of the study. The researcher explained the purpose, objectives, and significance of the study, particularly its focus on teachers' readiness, utilization of assistive technology, challenges encountered, school administrative support, and additional support needed in supporting learners with disabilities. Participation was voluntary, and the participants were informed that all information gathered would be treated with confidentiality. An informed consent form was provided and accomplished by the participants before the conduct of the interviews to confirm their willingness to participate in the study.

Data Gathering. The primary instrument used for data collection was a researcher-made semi-structured interview guide consisting of open-ended questions organized according to the five areas of inquiry of the study. The questions explored the participants' readiness to integrate assistive technology, utilization of assistive technology during classroom instruction, challenges and their influence on instructional practices, school administrative support, and additional support needed to strengthen the use of assistive technology. The researcher conducted individual interviews with the selected participants and used probing and follow-up questions when necessary to clarify and obtain detailed descriptions of their experiences. The interviews were documented and the participants' responses were securely recorded and organized for subsequent transcription and analysis.

Post Data Gathering. After the completion of the interviews, the gathered responses were organized, transcribed, reviewed, and prepared for qualitative analysis. The researcher examined the transcripts to identify significant statements, recurring ideas, and patterns relevant to the five areas of inquiry. Similar responses were grouped according to shared meanings, which led to the development of categories and emerging themes. The themes were analyzed and interpreted in relation to the research questions and supported by relevant participant statements and literature. The findings served as the basis for the formulation of an Action Plan aimed at strengthening teachers' skills, improving access to assistive technology and accessible instructional resources, and providing continuous technical and professional support.

Ethical Considerations

Informed Consent. All participants were provided with clear information regarding the purpose, objectives, procedures, and significance of the study before their participation. The researcher explained the nature of the semi-structured interview, including the areas concerning teachers' readiness, utilization of assistive technology, challenges, school administrative support, and additional support needs. Each participant was required to accomplish an informed consent form to confirm voluntary participation and acknowledge their right to withdraw from the study at any time without negative consequences to their professional responsibilities.

Confidentiality and Anonymity. The privacy and confidentiality of the participants' information were strictly maintained throughout the conduct of the study. Personal identifying information, such as names and other details that could reveal the identity of the participants, was not included in the presentation, analysis, or reporting of the findings. Participant codes were used in organizing and presenting the interview data to maintain anonymity. All interview records, transcripts, and related research documents were securely stored and accessed only for academic and research purposes.

Voluntary Participation. Participation in the study was entirely voluntary. The participants were not subjected to any form of pressure, coercion, or obligation to participate. Their decision to participate or decline involvement in the study did not affect their employment status, professional evaluation, teaching responsibilities, or relationship with the administration of Ormoc City SPED Integrated School.

Beneficence and Non-Maleficence. The study upheld the principles of beneficence and non-maleficence by ensuring that participation did not expose the participants to harm, unnecessary risk, or undue inconvenience. The interview questions focused on the participants' professional experiences in utilizing assistive technology and did not require disclosure of unnecessary personal or sensitive information. The study aimed to generate relevant insights that could contribute to strengthening assistive technology practices, improving inclusive instruction, and identifying areas for teacher training and institutional support.

Ethical Approval and Coordination. Prior to the implementation of the study, the researcher secured formal approval from the administration of Ormoc City SPED Integrated School through proper communication and submission of the necessary research documents. Coordination with the school administration and designated personnel was conducted to facilitate the identification of qualified participants and the proper scheduling and conduct of the interviews. These procedures ensured that the study was conducted in accordance with institutional requirements and established ethical guidelines for qualitative educational research.

Data Analysis

The data gathered from the participants of Ormoc City SPED Integrated School were analyzed using thematic analysis to ensure systematic, meaningful, and accurate interpretation of their experiences. Since the study employed a qualitative phenomenological research design, no statistical treatment was used. The analysis focused on examining the participants' responses regarding their readiness to integrate assistive technology, utilization during classroom instruction, challenges and their influence on instructional practices, school administrative support, and additional support needed to strengthen the use of assistive technology in supporting diverse learners.

Transcription. The recorded interview responses were transcribed accurately to preserve the participants' accounts and experiences. The transcripts were reviewed carefully to ensure that the information gathered during the semi-structured interviews was properly documented and organized for analysis.

Significant Statements. The researcher reviewed the transcripts and identified significant statements that directly related to the five areas of inquiry. These statements represented important experiences, perceptions, practices, challenges, and support needs expressed by the participants.

Initial Coding. The identified significant statements were assigned initial codes based on their meanings and relevance to the research questions. Similar ideas and experiences were coded consistently to facilitate the organization and comparison of the participants' responses.

Categories. Related codes were grouped into categories according to their shared meanings and patterns. The categories represented recurring experiences related to teachers' readiness, utilization of assistive technology, challenges, administrative support, and additional support needs.

Emerging Themes. The categories were further examined and consolidated into themes that represented the common experiences and perspectives of the participants. The emerging themes were reviewed in relation to the research questions to ensure that they accurately reflected the participants' accounts.

Interpretation and Presentation of Findings. The identified themes were interpreted in relation to the participants' experiences and supported by relevant verbatim statements from the interviews and related literature. The findings were presented according to the five major areas of inquiry and were used as the basis for developing the Action Plan aimed at strengthening teachers' utilization of assistive technology to support diverse learners.

Findings

Seven teacher-participants provided accounts of readiness, classroom utilization, challenges, administrative support, and additional support needs. The following sections retain the source's fifteen themes, supporting participant statements, and complete coding matrices. Participants are identified by the codes used in the source findings.

Teachers' Readiness to Integrate Assistive Technology

Theme 1: Learning Through Training, Experience, and Self-Exploration

The participants described their readiness to integrate assistive technology as a continuing learning process developed through formal training, classroom experience, self-exploration, and interaction with colleagues. Their accounts showed that learning to use assistive technology did not come from a single source. Instead, teachers acquired knowledge and skills through professional training, actual classroom application, independent exploration, consultation with colleagues, and exposure to different tools and resources. These experiences enabled the participants to become more familiar with assistive technology and to determine how available tools could be adapted to the needs of learners with disabilities.

"I learned through trainings, experience, and trial and error." (Participant 1)

Theme 2: Developing Confidence Through Continuous Practice and Learning

The participants' responses revealed that their readiness to integrate assistive technology was also reflected in their developing confidence in using different tools and approaches in the classroom. Their confidence was not established immediately but developed gradually through repeated practice, actual classroom experience, and continued exposure to assistive technology. While some participants initially experienced uncertainty in using technology, they became more comfortable as they gained familiarity with different tools and learned how to apply them according to the needs of their learners. At the same time, the participants recognized that confidence did not mean complete mastery, as they remained open to learning new technologies and improving their practices.

"At first, not very confident kay still learning man lagi but gradually became comfortable through experience. And now confident gamay using basic educational assistive technology while still being open to learning new tools" (Participant 6)

"Low-tech assistive technologies are quite easier to navigate comapred to high-tech ones, so what I do is I usually ask help from my colleagues who are techier or sometimes I also watch video tutorials online, usually and I am, I

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

only feel confident when I know I familiarized myself with the tool and when I know that my learners would not be intimated by it." (Participant 3)

Theme 3: Adapting to the Diverse Needs of Learners

The participants' responses revealed that readiness to integrate assistive technology was also demonstrated through their ability to recognize and respond to the diverse needs of learners with disabilities. The participants described learners as having different abilities, communication needs, levels of responsiveness, sensory requirements, and ways of accessing information. These differences required teachers to avoid relying on a single instructional approach and instead select, modify, or combine assistive technology and other instructional strategies according to the needs of individual learners. Thus, readiness involved not only familiarity with technology but also the ability to exercise professional judgment and adapt instructional practices to promote learner participation and understanding.

"This includes picture cards, visual schedules, large-print materials for learners with low vision, tactile resources, and real objects to make lessons more accessible for learners with visual impairment or those who are blind. I provide a Brailler, slate and stylus, and smartphone." (Participant 4)

"For number three, first, I identify the competency and the specific needs of my learners. Then, I choose the proper technology or digital material that can help them understand the lesson." (Participant 7)

Table 1

Thematic Analysis of Teachers' Readiness to Integrate Assistive Technology

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Training, workshops, webinars, and professional development helped teachers learn about assistive technology.	Training; workshops; webinars; professional development	Formal learning experiences	Theme 1: Learning Through Training, Experience, and Self-Exploration
Teachers learned through actual classroom experience and repeated use of assistive technology.	Classroom experience; practical application; repeated use	Experiential learning	
Teachers explored technologies independently through online tutorials, manuals, instructional videos, and research.	Self-exploration; online tutorials; manuals; research	Independent learning	
Teachers consulted colleagues, particularly those who were more familiar with technology.	Peer consultation; colleague support	Collaborative learning	
Teachers became more comfortable and confident as they repeatedly used assistive technology.	Increased confidence; familiarity; repeated practice	Confidence development	Theme 2: Developing Confidence Through Continuous Practice and Learning
Some teachers initially lacked confidence but gradually became comfortable with basic assistive technology.	Initial uncertainty; gradual confidence	Growing competence	
Teachers recognized that there were still new tools and skills to learn.	Continuous learning; openness to learning	Lifelong professional learning	

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers considered learners' different abilities, communication needs, sensory needs, and levels of responsiveness when using technology.	Learner variability; individual needs	Understanding learner differences	Theme 3: Adapting to the Diverse Needs of Learners
Teachers modified materials and instructional approaches according to individual learner needs.	Adaptation; modification; individualized support	Responsive instruction	
Teachers selected visual, tactile, digital, communication, and other supports according to learner characteristics.	Appropriate tool selection; individualized technology	Learner-responsive technology use	

Utilization of Assistive Technology During Classroom Instruction

Theme 1: Matching Assistive Technology with Individual Learner Needs and Instructional Objectives

The participants' responses revealed that the utilization of assistive technology during classroom instruction began with identifying the specific needs of learners and determining how a particular tool could support the intended learning objective. Rather than using technology simply because it was available, the participants described considering the learner's disability, ability, communication needs, level of independence, and the purpose of the lesson before selecting an appropriate tool. Their accounts showed that assistive technology was used purposefully to address specific barriers to learning and participation.

> *"Before the lesson, I identify the learner's needs and possible barriers to participation. Then, I choose the appropriate assistive tool. For example, I may use a communication board for a nonverbal learner or a pencil grip for a learner with fine-motor difficulties. I demonstrate how to use the tool, give the learner time to practice, and observe whether it is helping them participate and meet the learning objective. After the activity, I evaluate its use. If it is not effective, I make adjustments or try another strategy. For me, the most important thing is that the technology matches the learner's individual needs." (Participant 5)*

Theme 2: Using Visual, Interactive, and Multimodal Supports to Enhance Learning

The participants' responses revealed that assistive technology was frequently utilized through visual, interactive, and multimodal supports to make classroom instruction more accessible and understandable to learners with disabilities. The participants described using pictures, videos, presentations, visual schedules, audio resources, interactive activities, tactile materials, sign language, demonstrations, and communication supports according to the needs of their learners. Their experiences showed that assistive technology was often combined with other instructional approaches to provide learners with different ways of receiving information, expressing understanding, and participating in classroom activities.

Theme 3: Monitoring and Adjusting Instruction Through Assistive Technology

The participants' responses revealed that the utilization of assistive technology involved continuous observation and adjustment during classroom instruction. The participants did not simply introduce a technological tool and assume that it would be effective. Instead, they observed how learners responded to the technology, assessed whether it supported the intended learning objective, and modified the tool, activity, or instructional approach when necessary. Their accounts demonstrated that monitoring learner responses was an important part of using assistive technology effectively because the appropriateness of a tool could only be determined through its actual use with the learner.

> *"I introduce it slowly, guide, observe, and adjust if needed." (Participant 1)*

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

Table 2

Thematic Analysis of Utilization of Assistive Technology During Classroom Instruction

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers first identified learner needs before selecting assistive technology.	Needs identification; learner assessment	Learner needs assessment	Theme 1: Matching Assistive Technology with Individual Learner Needs and Instructional Objectives
Teachers considered lesson objectives when deciding which technology or material to use.	Objective alignment; instructional purpose	Instructional alignment	
Teachers demonstrated the use of technology and provided guided practice.	Demonstration; guided practice	Supported technology use	
Teachers used visual schedules, pictures, videos, PowerPoint presentations, and other visual resources.	Visual supports; pictures; videos; presentations	Visual instructional support	Theme 2: Using Visual, Interactive, and Multimodal Supports to Enhance Learning
Teachers combined technology with sign language, gestures, demonstrations, tactile materials, and audio resources.	Multimodal instruction; sign language; tactile support; audio	Multimodal instructional support	
Teachers used communication boards, picture-based materials, timers, talking pens, and interactive activities.	Communication tools; interactive technology; low-tech AT	Interactive and communication support	
Teachers observed learners while technology was being used.	Observation; monitoring	Monitoring learner response	Theme 3: Monitoring and Adjusting Instruction Through Assistive Technology
Teachers modified, replaced, or supplemented technology when learners experienced difficulty.	Modification; replacement; adjustment	Instructional adjustment	
Teachers used alternative strategies when technology did not sufficiently support the learner or lesson objective.	Alternative strategy; adaptation	Responsive instructional decision-making	

Challenges and Their Influence on Instructional Practices

Theme 1: Limited Resources and Technical Difficulties as Barriers to Technology Integration

The participants' responses revealed that limited resources and technical difficulties were among the most common challenges encountered in integrating assistive technology for learners with disabilities. The participants identified concerns related to the limited availability of appropriate devices, insufficient or outdated materials, unstable internet connectivity, equipment problems, and the cost of acquiring suitable assistive technology. These challenges affected the participants' ability to consistently use technology during instruction and required them to make adjustments based on the resources available in their respective classrooms and schools.

Theme 2: Additional Time and Effort in Preparing Accessible Instructional Materials

The participants' responses revealed that integrating assistive technology required additional time and effort, particularly when teachers needed to prepare, modify, simplify, or adapt instructional materials to make them accessible to learners with disabilities. The participants explained that available materials were not always appropriate for the specific needs of their learners. As a result, teachers often had to search for suitable resources, modify existing materials, prepare alternative formats, and provide additional guidance before these resources could be used effectively during instruction. These demands added to the preparation required for classroom teaching and influenced how the participants planned and organized their lessons.

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

"I recommend more hands-on training in using technology for learners with disabilities, along with updated devices, reliable internet, and accessible learning materials. Teachers also need continuous technical support and opportunities to share effective practices. Technology is most effective when it is matched to learners' actual needs." (Participant 2)

Theme 3: Instructional Adaptation and Resourcefulness in Responding to Learner and Technology-Related Challenges

The participants' responses demonstrated that challenges in integrating assistive technology also influenced teachers to become more adaptive and resourceful in their instructional practices. When appropriate devices, stable internet connectivity, or suitable digital materials were unavailable, the participants did not simply discontinue the lesson. Instead, they modified instructional materials, shifted to alternative resources, used low-tech supports, provided additional assistance, and adjusted their strategies according to the learners' responses. Their experiences indicated that resourcefulness was an important part of sustaining instruction when technology-related difficulties occurred.

"I first look at what the learner needs and choose a tool or approach that can make the task easier or more meaningful. I may use visual schedules, pictures, communication tools, modeling, repetition, prompting, or a reward system. I introduce it slowly, guide the learner, and observe how they respond. If it doesn't work, I try another approach. There is always trial and error, and nothing is wasted, and that's for sure." (Participant 1)

Table 3
Thematic Analysis of Challenges and Their Influence on Instructional Practices

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers experienced limited access to assistive technology, devices, and instructional resources.	Limited resources; inadequate devices	Resource limitations	Theme 1: Limited Resources and Technical Difficulties as Barriers to Technology Integration
Internet connectivity and equipment problems interrupted technology-supported instruction.	Internet problems; equipment failure; technical difficulties	Technical barriers	
Some available materials were not accessible or appropriate for learners with disabilities.	Inaccessible materials; unsuitable content	Accessibility barriers	
Teachers needed additional time to search for, prepare, simplify, and modify materials.	Preparation time; material modification	Additional preparation demands	Theme 2: Additional Time and Effort in Preparing Accessible Instructional Materials
Teachers modified videos, visual materials, large-print resources, tactile materials, and other instructional resources.	Adaptation; accessible formats; material preparation	Accessibility preparation	
Teachers spent additional time demonstrating technology, guiding learners, observing responses, and making adjustments.	Guided practice; observation; adjustment	Additional instructional effort	
Teachers used printed pictures, flashcards, demonstrations, and hands-on materials when technology was unavailable.	Alternative materials; backup strategies	Alternative instructional resources	Theme 3: Instructional Adaptation and Resourcefulness in Responding to Learner and Technology-Related Challenges
Teachers modified instructional strategies when technology did not work as intended.	Instructional flexibility; modification	Adaptive instruction	
Teachers used trial and error to identify approaches that worked for particular learners.	Trial and error; experimentation	Resourceful problem solving	

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers combined assistive technology with non-technological instructional strategies.	Technology and non-technology integration	Flexible instructional practice	

School Administrative Support

Theme 1: Professional Development and Capacity-Building Support

The participants' responses revealed that professional development was one of the important forms of administrative support for teachers integrating assistive technology. The participants described receiving training, seminars, workshops, Learning Action Cell sessions, and other professional learning opportunities that helped them develop knowledge and skills related to assistive technology and inclusive instruction. These opportunities allowed teachers to become more familiar with available technologies, explore instructional applications, and gain confidence in addressing the diverse needs of learners with disabilities.

> *"Most of what I learned came from training, experience, and trial and error. In a self-contained classroom, you learn to be creative and flexible because what works for one child may not work for another. I use different approaches such as visual support, modeling, repetition, prompting, and the reward system. I'm becoming more confident, but I also believe there's always something new to learn, so we all have that saying: we never graduate in learning." (Participant 1)*

Theme 2: Provision of Assistive Technology, Instructional Resources, and Learning Facilities

The participants' responses revealed that school administrative support also involved providing access to assistive technology, instructional resources, and learning facilities that enabled teachers to address the needs of learners with disabilities. The forms of support described by the participants included ICT resources, specialized assistive devices, learning resource centers, tactile materials, Braille-related equipment, and other instructional resources. These resources helped teachers implement accessible learning activities and respond to learners with different communication, sensory, and learning needs.

> *"So, here in Ormoc City, we have an exclusive Learning Resource Center where we can access materials that support our learners. At present, we do not have therapy or other specialized services, so teachers are the ones to make use of the available materials and adapt them to our learners' needs." (Participant 1)*

Theme 3: Gaps in Specialized Services and Continuing Institutional Support

The participants' responses revealed that school administration provided important support for the integration of assistive technology, but gaps remained in specialized services, updated resources, technical assistance, and continuing institutional support. Although the participants acknowledged the assistance provided by their schools through training, learning resource centers, ICT resources, specialized devices, and professional development activities, they also identified areas where existing support could be strengthened. Their accounts showed that effective integration of assistive technology required continuing institutional support that addressed not only teachers' knowledge and skills but also the availability, accessibility, maintenance, and sustainability of resources and specialized services.

> *"The Learning Resource Center is exclusive in Ormoc City, but we don't have therapy or specialized services. We adapt the available materials." (Participant 1)*

Table 4

Thematic Analysis of School Administrative Support

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers received training, workshops, seminars, and professional development opportunities.	Training; seminars; professional development	Capacity building	Theme 1: Professional Development and Capacity-Building Support

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Learning Action Cell sessions and professional learning activities provided opportunities for teachers to learn and share practices.	LAC sessions; professional learning; sharing	Collaborative professional development	
Administrators encouraged teachers to explore technology and innovative instructional practices.	Administrative encouragement; innovation	Institutional encouragement	
Schools provided ICT resources, learning resource centers, specialized devices, and technical assistance.	ICT resources; LRC; specialized devices	Institutional resource provision	Theme 2: Provision of Assistive Technology, Instructional Resources, and Learning Facilities
Some schools had specialized resources such as Braille printers and tactile materials.	Specialized equipment; tactile resources	Specialized learning facilities	
Teachers were allowed to use available technologies in classroom instruction.	Technology access; administrative permission	Access to instructional technology	
Teachers identified the absence of therapists and other specialized services.	Lack of specialists; lack of therapy	Gaps in specialized services	Theme 3: Gaps in Specialized Services and Continuing Institutional Support
Teachers identified limitations in funding, devices, internet connectivity, and accessible instructional materials.	Funding limitations; resource gaps; connectivity problems	Continuing institutional limitations	
Teachers needed updated devices, accessible resources, technical assistance, and continuing professional support.	Updated resources; technical support; continuing training	Continuing institutional support	

Additional Support Needed by Teachers

Theme 1: Hands-on Training and Continuous Professional Development

The participants emphasized the need for practical and continuous professional development to strengthen their ability to use assistive technology effectively. Although several participants had already attended trainings, workshops, seminars, and other professional development activities, they expressed the need for opportunities that would allow them to directly practice using assistive devices, applications, and instructional materials. The participants indicated that hands-on training would help them become more familiar with different technologies and understand how these could be applied to learners with different disabilities.

Participant 1 identified hands-on training as an important form of additional support, together with accessible devices and professional assistance. This indicated that training needed to be connected with actual resources so that teachers could practice using technologies relevant to their classroom situations.

Participant 2 also emphasized hands-on training and continuous technical support. The participant identified the need for training that would be supported by updated devices, accessible materials, and opportunities to share practices with other teachers. This showed that professional development was viewed as a continuing process rather than a single training activity.

Participant 4 similarly emphasized regular hands-on training, mentoring, and technical assistance. The participant indicated that teachers needed opportunities to develop practical skills in using assistive technology and continued guidance when applying these technologies in classroom instruction.

Participant 5 identified regular enhancement training, demonstrations, and classroom applications as important forms of support. The participant also emphasized guidance in choosing appropriate tools and opportunities to share

practices. This indicated that training needed to be directly connected to actual classroom needs and instructional situations.

Participant 7 likewise emphasized hands-on training involving different disabilities and the use of actual devices and applications. The participant also identified continuous technical support and sharing of practices as important. This showed that teachers needed both practical exposure and continuing assistance to strengthen their use of assistive technology.

Theme 2: Access to Updated Assistive Technology, Accessible Materials, and Reliable Technical Resources

The participants emphasized the importance of having adequate, updated, and accessible assistive technology resources in their schools. Their responses showed that teachers needed functional devices, appropriate instructional materials, assistive software, and reliable internet connectivity to implement technology-supported instruction effectively. They also indicated that access to technology needed to be accompanied by materials that were appropriate for the specific communication, sensory, and learning needs of learners with disabilities.

Participant 1 identified accessible devices as an important need. This indicated that teachers required technologies that could be used effectively with learners who had different communication and learning needs.

Participant 2 emphasized the need for updated devices, reliable internet connectivity, and accessible materials. The participant's response demonstrated that technology could not fully support instruction when digital resources were difficult to access or when the materials were not appropriately designed for deaf learners.

Participant 3 emphasized that devices introduced during training should remain accessible and available to teachers after the training. The participant also expressed the importance of extending access to assistive technology beyond SPED schools and into inclusive general education settings. This indicated that teachers needed opportunities to apply the technologies they encountered during professional development.

Participant 4 identified the need for adequate and updated devices, reliable internet, assistive software, and sufficient resources. This demonstrated that both hardware and software were necessary for teachers to address the varied needs of learners with disabilities.

Participant 5 emphasized the need for more devices and instructional materials. The participant's response indicated that additional resources could provide teachers with more options when selecting technologies and materials appropriate for particular learners.

Participant 7 likewise identified the need for dedicated devices, reliable internet, software, and other instructional resources. This showed that consistent access to functional technology was important for integrating assistive technology into regular classroom instruction.

Theme 3: Sustained Technical Support, Collaboration, and Teacher Involvement in Assistive Technology Decisions

The participants also emphasized the need for continuing technical assistance, professional collaboration, mentoring, and teacher involvement in decisions concerning assistive technology. Their responses showed that teachers needed support not only when learning how to use technology but also when encountering technical difficulties, selecting appropriate tools, adapting resources, and determining whether a particular technology was suitable for a learner. The participants further recognized the value of sharing practices with colleagues and involving teachers in decisions concerning the resources that would be provided and used in their classrooms.

Participant 2 emphasized continuous technical support and opportunities for teachers to share practices. This indicated that teachers could benefit from a support system in which they could seek assistance when encountering technical difficulties and exchange practical strategies with colleagues.

Participant 4 identified technical assistance and mentoring as additional needs. The participant's response showed that teachers required continuing guidance when applying assistive technology rather than relying solely on the knowledge gained during formal training.

Participant 5 emphasized guidance in selecting appropriate tools, opportunities for sharing practices, and teacher involvement in selecting assistive technology. This indicated that teachers should have an active role in determining which technologies and materials were appropriate for their learners because they directly observed learner needs and responses during classroom instruction.

Participant 7 also identified continuous technical support and opportunities to share practices as important forms of assistance. The participant's response demonstrated that collaboration could help teachers address common challenges and learn from the experiences of colleagues using assistive technology in different instructional situations.

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

Table 5

Thematic Analysis of Additional Support Needed by Teachers

Significant Ideas / Responses	Initial Codes	Categories	Emergent Theme
Teachers requested hands-on training in using assistive technology.	Hands-on training; practical training	Practical professional development	Theme 1: Hands-on Training and Continuous Professional Development
Teachers wanted demonstrations and opportunities to apply technologies in actual classroom situations.	Demonstration; classroom application	Application-based learning	
Teachers requested regular enhancement training, mentoring, and continuing professional development.	Enhancement training; mentoring; continuous learning	Sustained professional development	
Teachers requested updated and dedicated assistive technology devices.	Updated devices; dedicated devices	Adequate technology resources	Theme 2: Access to Updated Assistive Technology, Accessible Materials, and Reliable Technical Resources
Teachers identified the need for accessible instructional materials and appropriate assistive software.	Accessible materials; assistive software	Accessible digital and instructional resources	
Teachers identified reliable internet connectivity as necessary for technology-supported instruction.	Reliable internet; connectivity	Technical infrastructure	
Teachers requested continuous technical assistance and mentoring.	Technical assistance; mentoring	Continuing technical support	Theme 3: Sustained Technical Support, Collaboration, and Teacher Involvement in Assistive Technology Decisions
Teachers wanted opportunities to share practices and strategies with colleagues.	Sharing practices; collaboration	Professional collaboration	
Teachers wanted guidance in selecting appropriate assistive technology.	Tool selection; professional guidance	Decision support	
Teachers wanted to participate in decisions regarding the selection of assistive technology and instructional resources.	Teacher involvement; resource selection	Participatory decision-making	

Output of the Study

The proposed Action Plan responds to teachers' experiences in moving from readiness to actual use of assistive technology. The findings identified learning through training and experience, matching tools to individual learner needs, and adjusting instruction when resources or technologies were inadequate. Continuing needs concerned hands-on training, accessible resources, technical assistance, and sustained administrative and professional support.

The plan proposes strengthening teachers' skills, adapting assistive technology to learner needs, improving access to accessible instructional materials, providing continuous technical and professional assistance, and promoting collaboration. Implementation is organized around preparation, capacity building, resource provision, technical support, and collaboration. The complete source plan, including budgets, responsible persons, timelines, and expected outcomes, is retained in Appendix A; these are proposed activities rather than evaluated intervention results.

Action Plan Objectives

Strengthen teachers' skills in using assistive technology.

INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF RESEARCH FOR INNOVATION, SUSTAINABILITY AND EXCELLENCE
Published by: RISEJOURNALS.ORG | Online ISSN: 3028-032X | Print ISSN: 3028-0370
VOLUME 5, ISSUE NO. 2

Enhance teachers' ability to adapt assistive technology to learner needs.
Improve access to accessible instructional resources.
Provide continuous technical and professional support.
Promote collaboration in sustaining assistive technology practices.
Scheme of Implementation

The action plan will be implemented through five major phases: preparation, capacity building, resource provision, implementation, and monitoring and evaluation. During the preparation phase, the school administration and teachers will identify priority needs, available resources, and training requirements related to assistive technology. The capacity-building phase will focus on hands-on training, demonstrations, and practice sessions to strengthen teachers' skills in selecting, using, and adapting assistive technology according to learners' needs.

The resource provision phase will involve identifying and maximizing available assistive devices, accessible instructional materials, software, and technical resources. The implementation phase will allow teachers to apply the acquired knowledge and skills in actual classroom instruction while using appropriate assistive technology and alternative strategies when technical or resource-related challenges occur. Finally, the monitoring and evaluation phase will involve checking teachers' participation, application of learned skills, use of available resources, and areas requiring further technical or professional support.

The implementation will be carried out collaboratively by school administrators and teachers to ensure that the activities are attainable, responsive to identified needs, and sustainable within the school context.

Discussion

This finding was consistent with Campado, Toquero, and Ulanday (2023), who found that teachers' integration of assistive technology was influenced by their experiences, knowledge, and available support. Their study of teachers working with learners with special educational needs and disabilities also identified training and professional support as important considerations in strengthening the use of assistive technology. Similarly, Delima et al. (2025) emphasized the importance of professional development in strengthening the knowledge and competence of special education teachers.

The finding was consistent with Delima et al. (2025), who emphasized the importance of professional development in strengthening the self-efficacy and competence of special education teachers. Their findings highlighted the value of continuing professional learning in developing teachers' confidence and capacity to respond to the needs of learners with disabilities. The finding also supported Campado et al. (2023), who identified teachers' experiences, training, and support as important considerations in the integration of assistive technology in teaching learners with special educational needs and disabilities.

This finding was consistent with the principles of Universal Design for Learning, which emphasize learner variability and the provision of multiple means of engagement, representation, and action and expression (CAST, 2024). The participants' use of visual, tactile, audio, interactive, and communication supports reflected the need to provide different ways for learners to access information and participate in learning. The finding also aligned with Campado et.al (2023), who found that assistive technology could support learners with special educational needs and disabilities when teachers considered their specific instructional needs and adapted technology to classroom contexts.

This finding was consistent with the principles of Universal Design for Learning, which recognize learner variability and emphasize the use of multiple means of engagement, representation, and action and expression (CAST, 2024). The participants' practices reflected this principle by selecting different forms of technological and instructional support according to how learners accessed information and participated in classroom activities. The finding was also consistent with Campado et al. (2023), who reported that teachers used assistive technology to support learners with special educational needs and disabilities and emphasized the importance of selecting and applying technology in response to learners' instructional needs.

Campadoe et al. (2023) corroborated that teachers encountered challenges related to inadequate resources and the use of assistive technology in supporting learners with special educational needs and disabilities. The participants' experiences further showed that administrative support needed to include not only the provision of technology but also continuous professional development, accessible materials, technical assistance, reliable connectivity, and specialized services. CAST (2024) also emphasized the importance of providing flexible and accessible means of engagement, representation, and action and expression to respond to learner variability. The participants' need for captioned materials, visual resources, Braille, tactile materials, and updated assistive devices reflected the importance of providing resources that could accommodate different learner needs.

Toto et al. (2024) emphasized the role of technology in inclusive education, particularly in supporting personalized learning, accessible content delivery, and equitable learning opportunities. Their systematic review supported the participants' emphasis on having technologies and digital resources that could respond to the varied needs of learners.

Johnson and Erasmus (2024) also identified resource shortages as one of the challenges affecting educators' ability to provide effective learning support. Their findings emphasized the importance of appropriate resources and organizational support in strengthening inclusive educational practices.

Ufermann et al. (2025) found that effective cooperation in inclusive education was strengthened by positive communication, clear responsibilities, supportive relationships, and organizational support. Their review also showed that effective cooperation could contribute to a more supportive professional environment and strengthen inclusive school development.

Johnson and Erasmus (2024) similarly emphasized collaboration and communication as important components of organizational support for educators providing learning support. Their findings indicated that effective support structures needed to provide educators with appropriate guidance, resources, and opportunities for collaboration.

Conclusion

The study concluded that teachers' effective use of assistive technology depended on continuous learning, adaptability to learner needs, and sustained administrative support. Teachers remained resourceful despite limitations in resources, technical difficulties, and accessible materials. Administrative support through training and available resources helped sustain technology integration. Continuous improvement and adequate support were necessary to strengthen assistive technology practices.

Recommendations

The action plan should be implemented to strengthen teachers' readiness and practice in utilizing assistive technology to support diverse learners. It should focus on hands-on training, updated assistive technology and accessible instructional resources, and continuous technical and professional support. School administrators and teachers should work collaboratively to sustain and monitor the implementation of the action plan.

References

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Campado, R. J., Toquero, C. M. D., & Ulanday, D. M. (2023). Integration of assistive technology in teaching learners with special educational needs and disabilities in the Philippines. *International Journal of Professional Development, Learners and Learning*, 5(1), Article ep2308. https://doi.org/10.30935/ijpdll/13062

CAST. (2018). *Universal design for learning guidelines version 2.2*. https://udlguidelines.cast.org/

Department of Education. (2019). *DepEd Order No. 21, s. 2019: Policy guidelines on the K to 12 basic education program*. https://www.deped.gov.ph/

Eskici, M., & Çayak, S. (2023). The relationship between teachers' technology proficiencies and their levels of integrating technology into their lessons. *Journal of Educational Technology and Online Learning*, 6(4), 808–821. https://doi.org/10.31681/jetol.1331971

Fernández-Batanero, J. M., Montenegro-Rueda, M., Fernández-Cerero, J., & García-Martínez, I. (2022). Assistive technology for the inclusion of students with disabilities: A systematic review. *Educational Technology Research and Development*, 70, 1911–1930. https://doi.org/10.1007/s11423-022-10127-7

González, J., & Estrella, M. (2023). Inclusive education and assistive technology: Policy and practice in the Philippines. *International Journal of Inclusive Education*, 27(2), 145–160.

Howard, S. K., Tondeur, J., Siddiq, F., & Scherer, R. (2021). Ready, set, go! Profiling teachers' readiness for online teaching in secondary education. *Technology, Pedagogy and Education*, 30(1), 141–158. https://doi.org/10.1080/1475939X.2020.1839543

Johnson, F., & Erasmus, C. J. (2024). Equipping educators for learning support: A systematic review. *British Journal of Special Education*, 51(3), 296–316. https://doi.org/10.1111/1467-8578.12522

Macapaz, M. K. S. (2024). Exploring teachers' attitudes and burnout in inclusive classrooms. *International Journal of Intelligent Systems and Applications in Engineering*, 12(4), 2363–2372. https://ijisae.org/index.php/IJISAE/article/view/6635

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054. https://doi.org/10.1111/j.1467-9620.2006.00684.x

Nistal Anta, V., López-Aguado, M., & Gutiérrez-Provecho, L. (2024). Teacher competences for inclusion of students with special educational needs: A systematic review. *Revista Complutense de Educación*, 35(2), 393–405. https://doi.org/10.5209/rced.83175

Park, J., Gremp, M., & Ok, M. W. (2024). Effects of assistive technology instruction on pre-service teachers: A systematic review. *Journal of Special Education Technology*, 39(3), 349–362. https://doi.org/10.1177/01626434231210988

Quiño-Justol, J. B. (2024). Perspectives of teachers on the integration of assistive technology in higher education inclusive classrooms in the Philippines: Importance, benefits, social support, and challenges. *Journal of Interdisciplinary Perspectives*, 2(12), 497–509. https://doi.org/10.69569/jip.2024.0428

Quirao, H. M., Pinili, L., Sitoy, R. E., Capuno, R. G., Espina, R. C., Peteros, E. D., Delos Reyes, N. R. T., & Anero, M. B. (2025). Level of perception and challenges on technology utilization in an inclusive classroom setting. *Psychology and Education: A Multidisciplinary Journal*, 46(8), 1124–1136. https://doi.org/10.70838/pemj.460810

Republic of the Philippines. (1992). *Republic Act No. 7277: Magna Carta for disabled persons*. https://lawphil.net/statutes/repacts/ra1992/ra_7277_1992.html

Republic of the Philippines. (2012). *Republic Act No. 10173: Data Privacy Act of 2012*. https://lawphil.net/statutes/repacts/ra2012/ra_10173_2012.html

Republic of the Philippines. (2013). *Republic Act No. 10533: Enhanced Basic Education Act of 2013*. https://lawphil.net/statutes/repacts/ra2013/ra_10533_2013.html

Republic of the Philippines. (2022). *Republic Act No. 11650: An act instituting a policy of inclusion and services for learners with disabilities in support of inclusive education, establishing inclusive learning resource centers of learners with disabilities in all school districts, municipalities and cities, providing for standards, appropriating funds therefor, and for other purposes*. https://lawphil.net/statutes/repacts/ra2022/ra_11650_2022.html

Rogers, E. M. (2003). *Diffusion of innovations (5th ed.)*. Free Press.

Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Association for Supervision and Curriculum Development.

Sanchez, A. L. (2025). Bridging learning gaps through the use of assistive technology among learners in special needs and inclusive education settings. *Psychology and Education: A Multidisciplinary Journal*, 50(10), 1146–1153. https://doi.org/10.70838/pemj.501003

Starkey, L. (2020). A review of research exploring teacher preparation for the digital age. *Cambridge Journal of Education*, 50(1), 37–56. https://doi.org/10.1080/0305764X.2019.1625867

Toto, G. A., Marinelli, C. V., Cavioni, V., Di Furia, M., Traetta, L., Iuso, S., & Petito, A. (2024). *What is the role of technologies for inclusive education? A systematic review. In G. Casalino, R. Di Fuccio, G. Fulantelli, P.*

Raviolo, P. C. Rivoltella, D. Taibi, & G. A. Toto (Eds.), Higher education learning methodologies and technologies online (pp. 533–565). Springer. https://doi.org/10.1007/978-3-031-67351-1_36

Ufermann, L., Domsch, H., & Urton, K. (2024). Perspectives of learning and support assistants on cooperation with teachers in inclusive education: A systematic literature review. *European Journal of Special Needs Education*, 40(2), 943–959. https://doi.org/10.1080/08856257.2024.2445407

UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. https://unesdoc.unesco.org/ark:/48223/pf0000098427

United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. https://sdgs.un.org/2030agenda