iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** XI **Month of publication:** November 2023

DOI: https://doi.org/10.22214/ijraset.2023.56953

www.ijraset.com

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

Teacher's Competencies in Integrating TPACK Model into a Hyflex Teaching and Learning of Learners with Special Educational Needs

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Abstract: ***This study evaluated the level of competency of SpEd teachers and receiving teachers in integrating TPACK Model for the HyFlex teaching and learning of Learners with Special Educational Needs (LSENs) in Bantayan Central Elementary School - SpEd Center, Don Vicente Rama Memorial Elementary School - SpEd Center, and Mandaue City Central Special EducationSchool for the school year 2022-2023 as the basis for action plans. A quantitative method was utilized in evaluating the study. A descriptive method employed with the use of an adapted instrument to gather data from 38 teacher respondents. Gathered data were analyzed using frequency, weightedmean, and Chi-square. Findings revealed that about 36.84% of the respondents are aged 30 to 39.Most teachers are handling 1 to 10 LSENs in a class. These teachers have attended 61 or more hours of training, seminars, and workshops. Teachers' competencies in content knowledge and pedagogical knowledge got the highest mean of 3.29 (Highly Competent). The competency in technological knowledge got the lowest mean of 3.16 (Competent). The challenges encountered by the teachers are as follows; lack of network connectivity, heavy workload follows this from home, and school activity, and the indicator lack of technical materials and equipment. Therefore,teachers are competent in integrating TPACK for Hyflex mode of teaching. Hence, it is strongly recommended that the output of the study with its scheme of implementation and the action plansshall be developed by all concerned parties.***

Keywords: Special Education, TPACK, Hyflex, teachers' competency, descriptive correlational method,Cebu City, Phil

I. THE PROBLEM AND ITS SCOPEINTRODUCTION

A. Rationale of the Study

The World Health Organization declared COVID-19 as a global pandemic. Due to this health crisis it changed the system of education related to curriculum, educator functions, learners' positions and assessments. COVID-19 has also changed the way of educating future generations and even led to redefining the role of educators. There are lots of educational methods, strategies, and approaches that were used during thepandemic to address the educational gap. One of these is the Technology Pedagogy Content Knowledge (TPACK) Model. This model is the integration of technology, pedagogy and content knowledge of the teachers. In Special Education (SpEd) program, combining the modern assistivetechnologies to the existing ways to facilitate learning using the modified essential content of thecurriculum, gives a huge impact to address the needs of Learners with Special Educational Needs (LSENs). The TPACK Model also supports Inclusive Education in SpEd program because it helps the learners to be more functional enough in their different development domains by giving thema better learning experience. Using the TPACK Model in teaching and learning context it enhancesthe competency of SpEd teachers and Receiving teachers to provide a meaningful learning experience to Learners with Special Educational Needs (LSENs) during this pandemic. The shift from traditional teaching methods to remote learning is a complex consideration.The Department of Education (DepEd) establish some laws stating standard guidelines that they are ready to switch into modern ways of teaching using the technology as the application to pedagogy and content. These laws help to improve the teachers 'competency in creating learning resources, manipulating materials and equipment, following educational policies and guidelines, and management plans. Due to the current happenings learners with Intellectual Disability (ID), Hearing Impairment (HI), Visual Impairment (VI), Autism Spectrum Disorder (ASD), and Specific Learning Disability (SLD) including Gifted and Talented is having a difficulty in adapting in a modern way of learning. Teachers are also struggling on how they can concretely deliver the lessonfrom afar knowing that this is the first time they do distance learning approach in teaching and alsotheir technological competency and resources is a big consideration in implementing different modalities of learning applicable to current situation.

Blended Learning Mode (BLM) of teaching is implemented to address the educational gapduring this pandemic. This kind of teaching mode uses more than one delivery method to enhancethe achievement of the learning outcomes. Educational experts suggested that blended or hybrid teaching would seem to be a perfect solution. In blended teaching applied in the SpEd program, there are three important aspects to consider: the modification of curriculum, teaching pedagogy, and technological knowledge of teachers. Implementing this kind of teaching mode, teachers should also consider the individual differences of Learners with Special Educational Needs (LSENs) for them to be more comfortable and productive despite learning remotely.

Individual differences and Learner-Centered approach can be cultivated using flexible teaching strategies. In the SpEd program, teachers can use the Hybrid Flexible (HyFlex) teaching and learning mode for Learners with Special Educational Needs (LSENs). This teaching mode canprovide instructional structure, content, and activities to fulfill their needs in different class set-up.

Moreover, it also gives the them the freedom and control of their own learning while achieving the same intended learning outcomes. In HyFlex teaching and learning mode, teachers provide different learning activities with individualized instructions and authentic assessment that is aligned with the developmental capability of the Learners with Special Educational Needs (LSENs). The element of time, level ofdifficulty, and instructional design is important to address the needs of the learners. Collaborativelearning environment must be practiced to address the socio-emotional needs of the learners to have a flexible learning environment.

Due to the modernization of teaching and learning, teachers are having a struggle on how to properly facilitate learning remotely with the use of technology in executing the different modalities of learning to address the different needs of learners. Because of this situation, the researchers would like to know the competency level of SpEd teachers and Receiving teachers inthis paradigm shift to smoothly embrace the modern era of education. In the place where the research was conducted, they practiced Blended or HyFlex teachingand learning but there is no exact determination on how they integrate TPACK Model in teachingand learning for Learners with Special Educational Needs (LSENs). The researchers wanted to look for constructive ideas and solutions on how to integrate TPACK Model in HyFlex teaching and learning to effectively support the developmental progress of these learners in their different domains. This study helped to explore the underlying factors on the competency of SpEd teachers and Receiving teacher in integrating TPACK Model for the HyFlex teaching and learning of Learners with Special Educational Needs (LSENs). This study helped teachers to create an action plan in adapting to the modern way of teaching using technology as the application to the pedagogy, content and knowledge of the teachers.

B. Theoretical Background

This research is to evaluate the level of competency of SpEd Teachers and Receiving Teachers in integrating TPACK Model into HyFlex teaching and learning of Learners with Special Needs (LSENs). This research is anchored to the theory of Sociocultural Theory of Learning, Competence Theory, and Transformative Learning Theory. This is research is anchored by Philippine Constitutional Laws namely the RA 7277 Magna Carta for Persons with Disability the Republic Act 11650 and Republic Act No. 9155 and supported by DepEd Order Number 044, s. 2021, DepEd Order No. 012, s. 2020, and DepEd OrderNo. 018, s. 2020.

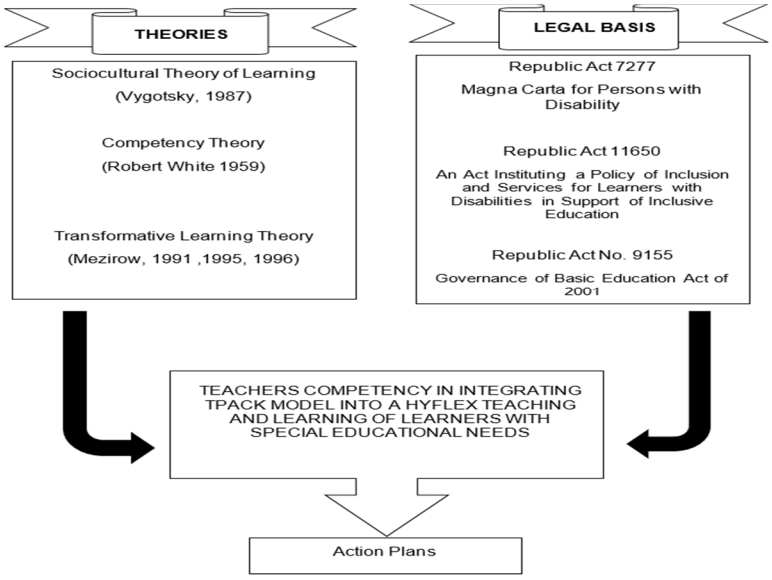

Figure 1. Conceptual Framework of the Study

C. Sociocultural Theory of Learning

The first theory for this study will explain how to enhance teacher's competency by interacting to the different sociocultural perspective for a betterused of technology as the application to teacher's pedagogy and content knowledge in teaching and learning process. According to Vygotsky's core principle of development, understood as the ability to intentionally organize and control one's own mental functioning (including, memory, attention, perception, rational thinking) through culturally constructed symbolic mediation (Yaroshevsky,1989).

This learning theory explains that in order for an individual to be fully aware and knowledgeable about the happenings in their immediate environment they need to rationally comprehend the different viewpoints and perspectives of each individual, interaction in collaborative writing (Li and Zhu, 2017), collaborative interaction (Peterson, 2009), collaborativedialogue (Zeng and Takatsuka, 2009), and negotiating and constructing meaning (Tan et al., 2010)with those individuals that has the same experience or those who already experienced and solve the problem can be a point of reference to create a new idea or concept. In other words, development is a socially regulated process in which social relationships are appropriated and internalized.

In the framework of socio-cultural learning theory, the Zone of Proximal Development (ZPD) stated that if the individual is acquiring new knowledge the guidance during the entire levelis the most essential for mastery. Interacting with the expectation of one certain field the individualis guided on how to properly attain the desired outcome. ZPD is applicable only during the earlystage and development if the desired skills are acquired and being mastered the individual displaya capacity and capability to stand alone to perform the task and to use the concept to create own idea and perspective about a certain concept by that Zone of Actual Development (ZAD) is beingreach.

The presence of the More Knowledgeable Others (MKO) is essential because they can input additional ideas to enhance your own understanding of a certain concept. The difference between a person's actual developmental level as determined by their ability to solve problems ontheir own and their potential level as determined by their ability to solve problems when obtainingadult assistance or working with more advanced peers (Vygotsky, 1978).

According to (Whitworth and Chiu, 2015), suggest that teaching experience is a critical factor of professional development and teacher change. Applying this theory to the SpEd set up, the teachers need to see and learn the ideas of others, practice the idea and ask for guidance. Oncethe concept is mastered and acquired, that's the time that teachers will create their own learning perspective on how they can enhance the way they teach, which is the pedagogy, to modify the content and to use the modern tool and equipment as a support to address different concerns in itsimmediate environment.

According to (Sharp, 2014), there is growing awareness that teachers must enter the classroom prepared to use digital tools in ways that transform teaching and learning. Technologypromotes its benefits to connect, interact, value, engage, communicate, and make meanings in a wide range of technology channels in authentic situations from diverse cultural backgrounds (Arifani, 2020; Arifani et al., 2021; Hafner et al., 2015). Technology also plays a vital role when it comes to teacher's development holistically. Engaging to a new trend of technology that can beallied to teaching and learning context is one aspect that the teachers should look into.

Learning to apply the technology to pedagogy and content needs some comprehensive training and hands-on experience to have concrete knowledge about how to apply it in teaching and learning context.

There is a teaching model that can be used in different settings. The TPACK highlights the areas of overlap between content, pedagogy, and technology (Harris et al., 2009; Koehler and Mishra, 2009; Mishra and Koehler, 2009) and asserts that effective teaching with technology happens only in these areas of overlap that are optimally integrated. In Learning the TPACK Model, the conceptualization of learning progressions as complex, strategic, non-linear processes that develop over time through protracted engagement with a set of ideas (Shavelson, 2009).

Applying this TPACK Model to sociocultural learning theory. SpEd teachers and Receiving teachers need to gain concrete technical ideas on how to use the modern technology and to experience how to manipulate and navigate it. Integrating their technical knowledge, teachers will be able to modify the content that can address the needs of Learners with Special Needs (LSENs) and can design a learning instruction using the technology. To enhance design, they canget suggestions from the experts and SpEd team or do some simulation to properly execute the methods and strategies being used. When teachers draw on this knowledge, practices, and so on intheir teaching, they form a crucial element of the learning context for the students, accompanied with the learning materials, physical environment, fellow-students, and so forth (Krolak-Schwerdt et al., 2014). The SpEd teachers and receiving teacher's competency transformation is not direct from external (interpsychological) to internal (intrapsychological), but needs to have consistent interaction and enhancement of common happenings, practicing concrete activities and immediatesocial interactions and this may lead to teacher's capability to builds own perspective and idea in dealing a certain problem. Teacher learning is an active meaning-making process in which they construct their cognition, knowledge and identity in practice (Golombek, 2017; Li, 2017).

It is an interactive process, where knowledge and understanding develop through collaboration with others (Li, 2017). Furthermore, development is anything but smooth and sequential; instead it proceeds in fits and starts and is better characterized as a revolutionary process (Vygotsky, 1978).

In Sociocultural Perspective, the SpEd teachers tend to reframe the way they describe andinterpret their own experience. These new understandings enable them to reorganize their own first-hand experience and it creates a new lens through which they interpret their understandings of themselves and the way they facilitate learning. Teachers populate 'expert' knowledge with their own intentions, in their own voices, and create instruction that is meaningful for their own objectives (Ball, 2000).

Competency Learning. The second theory that supports this study explains the capability and capacity of teachers to execute any particular competency. A teacher-trainee must possess certain knowledge, abilities, and values in order to successfully complete a program of teacher education. These requirements are known as competencies. (Houstan, 1987).

For a teacher to execute a dynamic way of teaching and to provide a meaningful learning experience a teacher should be developed holistically in different aspects.

Encouraging and developing the full potential of a teacher and becoming more competitive in any area of learning. Execution of highly competent teachers constructs their learning, aid and guide others, and takes an active role in the practical application of knowledge.

The point of view of this theory is for a teacher to be a highly competent individual they should holistically develop their knowledge in teaching, skills in teaching, intrapersonal, and interpersonal domains in interacting with their environment. For a teacher to attain a high level of competence in the field of education they should be provided skills and knowledge that will help them work collaboratively and sensitively in a team.

A highly competent teacher is a they can really address the need of the society by becominga decision-makers, plan and manage their time effectively, listen to one another, choose the right communication strategy at the right time (Nessipbayeva, 2012), construct a solution and execute and apply the best solution for a particular problem. Innovative teacher is one skill that all individuals must possess to cope in an ever-changing world.

Transformative Learning Theory (TLT). The last theory that will support this study explains the transformation of teachers as highly competent individuals to address the needs of the society. Transformative learning theory serves as a comprehensive way to understand the process whereby adult learners critically examine their beliefs, assumptions, and values in light of acquiring new knowledge and correspondingly shift their worldviews to incorporate new ideas, values and expectations (Cranton, 1994; Mezirow, 2000).

Mezirow (1996) provides an alternative perspective on the transformative learning theory and contends that during the learning process, people's perceptions and the feelings, thoughts, attitudes, and knowledge that go along with them change into new ways.

Transformative learning refers to transforming a problematic frame of reference to make it more dependable in our adult life by generating opinions and interpretations that are more justified.We become critically reflective of those beliefs that become problematic. Frames of reference maybe highly individualistic or shared as a paradigm. Transformative
learning is a way of problem solving through defining a problem or by redefining or reframing the problem.

SpEd teachers should be fully equipped to address the educational needs of those Learners with Special Needs (LSENs) during the pandemic. When it comes to executing a dynamic way of teaching, a SpEd teacher should have the initiative to innovate teaching ways that are more effective and suitable to the current situation. They should be able to experience the problems, reflect from the problem, think and innovate solutions, execute and apply the solution to address the educational gap due to the pandemic and to make a transformation in teaching in a flexible approach.

As SpEd teachers gain new knowledge and skill for an effective teaching and learning process, they attempt to integrate it into their prior beliefs and assumptions. Philippine teachers are not accustomed (Talidong, 2020; Toquero, 2020) to the new way of teaching. When it comes to the new modalities of learning as the new trend to address the educational gap due to the pandemic, the SpEd teachers has ambiguity and disagreement about what to teach, how to teach, the workload of teachers and students, the teaching environment, and the implications for education equity (Zhang et al., 2020).

In the Philippines, SpEd teachers stretch a hands-on approach in teaching their Learners with Special Needs (LSENs). However, this is even more challenging as they need to have an individualized approach through distance learning while considering the different needs of their learners. Teachers underscored the difficulties in accomplishing some learning points and in measuring the responses of the learners (Todd, 2020). Duraku and Hoxha (2020) justified that these are partly related to teachers' competency in implementing online learning and their skills inusing technology.

As the SpEd teachers are facing the problems when it comes to teaching in a flexible manner both online and offline class for Learners with Special Needs (LSENs), their beliefs are a big concern and problem that needs to be addressed. As these beliefs, assumptions and perceptions are critically examined and revised, transformational learning may occur. As stated by Mezirow, this process often includes redefining the problem. By its fundamental scope, one can see that transformational learning has the potential to deeply impact the lives and understanding of Sped teachers. In this research, SpEd teachers involved in professional development are recognized as experiencing transformational learning as they evaluate their competency and beliefs when it comes to teaching and learning context for SpEd program to address the educational gap due to pandemic. Therefore, the theory is used to examine and understand the changes they experience.

Adults' perspective transformations are frequently found to be prompted by disorienting dilemmas and proceed through multiple stages of progression (Mezirow et al., 1990). Amidst of his health crises the stakeholders of education, specifically the SpEd team are expecting that SpEd teachers should be technologically literate and effectively integrate it to pedagogy, content and assessment procedures. These forces create an intense demand for SpEd educators to cope with constant changes in teaching ways and may result in SpEd teachers experiencing a ''disorienting dilemma'' or ''trigger event'' that urges them to be more holistic educators as the changes occur in the field of education.

According to a study-based report, teachers in the new normal would have to employ new practices and forms of management both professionally and emotionally to adapt to the virus outbreak changes fully. The report provided a structured timeline for response management, such as guidance, utilizing technology, and forming digital recreational activities (Wyman, 2020).

Conditions like these, that cause Sped Teachers to question their competency in teaching and to change their actions, are the seedbeds of additional profound change of perspective transformation experiences yet to come. SpEd Teachers should receive enhancement training and seminars that can better enhance their selves in making a change to their Learners.

The teachers can undergo training based on their needs for module development and learning technologies (Daniel, 2020; Zhang et al., 2020). Laforga (2021) said that equity in education in the Philippines is possible by broadening the pathways into the teaching profession, increasing school-based coaching, prioritizing the well-being of our education workforce, promoting participant data ownership, and ultimately, by allowing teachers to participate in policy decision-making processes. It is important to adapt to new platforms that are emerging to expand the methods, strategies, and approaches that a SpEd teacher can use.

According to (Mezirow,1997), transformative learning is another term for independent thought because it helps us critique our own thought processes, our points of view and the fields that shaped them, whether they are family, friends, fashion, the media, academic disciplines, educational institutions, church or state. He also explains that belief elements as habits leading behaviors and, in this respect, postulates that teachers possess pedagogical beliefs in various factors. While (Cranton and King, 2003) supported Mezirow's argument and added that the teaching environment, the school structure, and experiences are influential factors in teachers' beliefs related to teaching.

Transformative learning helps the SpEd teachers reassess themselves when it comes to their teaching strategies, learning instructions, tech knowledge, and delivering the health guidelines and this enables them to apply whatever they learn in an unexpected situation. A SpEd teacher becomes effective members of the workforce in the field of education and for them to form new skills and knowledge for the future educational innovation.

This theory can greatly assist in framing the understanding of the changes of SpEd Teachers in their competency to facilitate learning during the pandemic. Viewing professional development as adult education, assists not only the educator as a learner, but also enables us to consciously apply appropriate relevant theory, research, and practice from the field of Special Education.

This research emphasized Republic Act 7277, otherwise known as the Magna Carta for disabled persons. The Philippine government gives their full support to those people with special needs or Persons with Disabilities (PWD). This law emphasizes that PDWs should be part of the different aspects of the society. The government imposes legal policies to promote the well-being of these individuals. Indicated in the policy the welfare of PWDs in terms rehabilitation, development, self-reliance and cultivate them as capable and equip member of the society. The Republic Act No. 11650 promotes inclusivity for all Learners with Special Needs (LSENs). This policy states that those LSENs should be included and receive the same privilege like other learners when it comes to accessing quality education. This policy greatly promotes the Education for All (EFA) of no child left behind. Because of this policy it helps the LSENs learners to continue schooling despite the pandemic through the use of modern technology and implementing remote teaching approaches using the different modalities of learning. Also, the DepEd Order No. 018, s. 2020. Provide the policy guidelines for the provision of Learning Resources in the Implementation of the Basic Education Learning Continuity (BE-LCP) that states about the provision of learning resources and release, utilization, and liquidation of support funds for the printing and delivery of self-learning modules and other learning resources as a modality in delivering education.

Covid-19 has impacted higher education worldwide (Daniel, 2020), causing a rapid shift from face-to-face to online teaching and assessment and upskilling of staff and students (Sun et al., 2020). To address the educational gap, flexible hybrid teachings were designed. Beatty in 2006 introduced one of the teaching models that allows both face-to-face sessions and online synchronous sessions. The hallmark of these flexible hybrid course designs is the HyFlex model.

DepEd Order Number 044, s. 2021. Policy Guidelines on the Provision of Education Programs and Services for Learners with Disabilities in the K to 12 Basic Education Program. There will be a general direction and advice provided by the accompanying policy guidelines thatinvolves planning, administration, and execution of suitable programs, services, and activities forLearners with Special Needs (LSENs) at the various levels of departmental governance. In order to meet the requirements of LSENs, this policy may also act as a reference for partners and externalstakeholders.

According to Beatty (2007), HyFlex incorporates synchronous, face-to-face instruction, live internet video instruction and asynchronous online course delivery all within the same course.Students' attendance during class is more flexible. They are given a choice in the way they want to attend the class. This pandemic, being flexible with the class schedule is one of the best optionsthat can be provided to the students because of the different limitations and regulations around them.

The HyFlex learning model is a combination of the hybrid learning model and a flexible learning classroom (Beatty, 2014). Including multiple modalities of learning like traditional face-to-face and online class set up in SpEd class, HyFlex modalities may include: (a) synchronous, FTF, (b) synchronous, virtual, (for example, Google Meet, Zoom, or Skype) and (c) asynchronousonline. The HyFlex model addresses many challenges that we faced by SpEd teachers and LSENsamidst of COVID- 19 (Lakhal et al., 2017; Beatty, 2007).

In the education sector, people with disabilities experienced the most aftermath as officialsterminated the face-to-face educational activities (Daniel, 2020; Robbins et al., 2020). Likewise, among special education teachers, there is ambiguity and disagreement about what to teach, how to teach, the workload of teachers and students, the teaching environment, and the implications foreducation equity (Zhang et al., 2020). Teachers experience difficulties finding the virtual strategiesthat are attuned to an online curriculum in dealing with learners who have developmental disabilities. As a result, students with educational needs and disabilities suffer the most educational consequences, apart from the deprivation of their health essentials during the pandemic (Jalali et al., 2020; Safta-Zecheria, 2020).

According to Betty (2007), the purpose of the HyFlex teaching model is a medium to address physical space limitations and to well accommodate all students with different background, knowledge and/or plan (Foust and Ruzybayev, 2021). Due to the current health situation, SpEd teachers effectively implement the teaching model.

Beatty (2019) and Nave (2020) created fundamental values' in the HyFlex model: learner choice (in the modality), equivalency (in learner outcomes regardless of modality), reusability (ofcontent and activities for the different modalities), and accessibility (to the technology and skills needed to engage.

Culturally responsive teaching emphasizes social and academic empowerment, multidimensional teaching through high-impact practices, validation of students' cultures, teaching in a holistic fashion, and providing novel and transformative teaching with immersive, school and society transformation (Gay, 2018). Beatty (2019) clarifies key principles of HyFlex courses as: (a) providing students a choice regarding how they will attend a given session, (b) offering equivalent learning activities in all modes, (c) using the same learning objects for all students, (d) ensuring that students are equipped with the technologies and skills to participate in all modes, and (e) employing authentic assessments.

Learning-to-teach, which is a complex and dynamic process, always involves identity formation, power negotiation, and competency refinement (Zhu,2017); Britzman, 1991; Clarke, 2008). In addressing the problem when it is a SpEd teacher's competency, there should be supportfrom expects and educational sectors to properly address the gap between the current situation andeducational system.

According to (Beatty, 2014), teaching under normal circumstances is based on recognizingthe natural diversity in students and their daily circumstances. For SpEd teacher's development when it comes to their competency in implementing the HyFlex teaching model in SpEd program,SpEd teachers must apply the best classroom management techniques they typically use in face- to-face settings in the HyFlex environment, including (a) setting expectations, (b) modeling the desired behavior, and (c) giving timely and explicit feedback to help students, especially young children and those with disabilities, follow the advised guidelines for physical distancing (CDC, 2020). Teaching in a HyFlex environment is not an easy task; the SpEd teachers must provide simultaneous, engaging instruction for both the online and face-to-face class set up, and always has to have a contingency plan for technology glitches. HyFlex provides flexibility for a newer issue, those or potential issues related to quarantining due to COVID-19 exposure, where Learnerswith Special Needs (LSENs) do not miss instruction, and can attend their regular classes in different settings.

In the current global happenings, enhancement, dynamic of teaching and innovation can address the needs of the ever-changing society. Knowing how to teach inside the classroom is notenough for a teacher to become more effective and efficient. Teaching in a HyFlex environment isnot an easy task; the teacher must provide simultaneous, engaging instruction for both the online and in-person learner, and always has to have a contingency plan for technology glitches.

Teaching in the HyFlex environment requires advanced planning, constant preparation, a commitment to flexibility, and comparable engagement with students (Beatty, 2019; Ferrero, 2020; Nave, 2020). Yeban (2020) suggested that teachers should reorient their practice toward designing learning tasks and episodes that engage students in the discovery and application. In order to makethe learning activity engaging for the students, create blended learning media that includes an interactive quiz and video conference, as well as being more flexible (Kristanto, 2017).

For teachers, preparing them for distant learning, blended learning, and online instruction is also advised in order to help them transition to the new educational model (Toquero, 2020). Studies revealed that technologically literate teachers have important roles to play for the effectiveand efficient use of technology in schools (Seufert et al., 2020).

The HyFlex model allows the Learners with Special Needs (LSENs) to choose which learning modality best meets their needs.

Using principles of learner-centered instruction in coursedesign for all modalities, the HyFlex course model claims to maintain the quality and rigor of a traditional FTF program (Beatty, 2007). In addition, the HyFlex model promotes higher levels of student participation over traditional FTF courses, and higher levels of student satisfaction in their learning experience (Malczyk, 2019). Implementing HyFlex to LSENs will be a holistic approachbecause each target area in education is given an importance and it finds the right balance betweenpedagogy, technology and compliance with the current regulations.

The HyFlex model allows the student to choose which learning modality best meets their needs. Using principles of learner-centered instruction in course design for all modalities, the HyFlex course model claims to maintain the quality and rigor of a traditional FTF program (Beatty,2007). As students make decisions about where, when, and even how they will access instruction.

(HyFlex approach), they also need to develop this independent and self-directed model of learning. The HyFlex model is student-centered, student-directed, multimodal, involves students in active learning in person and online, and requires full student engagement (Beatty, 2019; Ferrero, 2020). In the HyFlex model, Learners with Special Needs (LSENs) are provided with utmost flexibility. It can be challenging for the SpEd Teachers and Receiving Teachers because they needto pay attention and plan for different in-class learning activities. HyFlex is a student-centered design thus it aims to address more the needs of the LSENs. LSENs are given a mode ofengagement that works best for them. They are given the choice in the mode of learning that they want that still aims to contribute to their development. In HyFlex teaching, learning activities are available to all students regardless of the mode of learning they choose. With the help of the SpEdteachers and Receiving teachers, LSENs will become more equipped with the technology and skills so they can equally access all participation modes.

Technology holds great promise for students with disabilities. Appropriate integration of technology can potentially be a great equalizer in an inclusive or special education classroom, since it can engage and motivate learners, offer alternative representations of curriculum, provide options for students to express their knowledge in unique ways, and support differentiated instruction that meets the individual needs of students with disabilities (Courduff et al., 2016; Pace & Blue, 2010; Smith & Okolo, 2010). While digital education is a priority across the sector, the pandemic required adoption of novel approaches (Lockee, 2021). Using technology to deliver education is not enough. A smart strategy of delivering the content using technology could make a greater impact. TPACK Model is a great approach that can address three areas; technology, pedagogy, and content, to effectively deliver learning despite the limitations we are facing in our current educational set-up.

Different programmatic arrangements have been used to effectively prepare SpEd teachers, including traditional and integrated programs as well as innovative course enhancement. According to the study of Oliver, (2011); Voogt et. al., (2013); and Sang et, al., (2016), teachers should have competencies that include content knowledge, pedagogical knowledge, technological knowledge, or TPACK. It is very important to have the prerequisite skills needed to become innovative in teaching and to become an effective teacher.

TPACK provides a framework for understanding teacher knowledge needed for effective teaching with technology (Mishra and Koehler, 2006). The TPACK approach combines technology with materials and delivery strategies (Kriek et al., 2016; Marcovitz and Janiszewski,2015).

TPACK is described as technology-enhanced learning, which includes three complicated relationships between content, pedagogy, and technology. It is a phrase for a skill that a teacher must master in order to effectively utilizing technology in the teaching and learning process (Yehet al., 2021).

The TPACK Model offers a framework that teacher educators can use to determine how tohelp preservice special education teachers learn to make effective decisions regarding integratingtechnology into instruction (Lyublinskaya and Tournaki, 2014). The model provides a way to identify the varied and unique types of knowledge that teachers need to develop in order to integrate technology effectively.

In SpEd program technology is one of the important aspects to be considered because it adds flavor to perfectly provide a meaningful learning experience to Learners with Special Needs(LSENs). In executing a good TPACK skill, it will provide learning materials that can be accessedby students to be studied individually or discussed in groups (Mahdum, 2015; Akyuz, 2018).

According to (Green et al., 2005), online pedagogy is broken down into four key areas pivotal to individualized learning through digital technologies: 1) ensuring that learners are capable of making informed educational decisions; 2) diversifying and recognizing different forms of skills and knowledge; 3) creating diverse learning environments; and 4) including learner- focused forms of feedback and assessment.

In applying the TPACK Method in the field of SpEd program, consideration on how to integrate technical procedure in teaching, the modified content of the curriculum and technologicalliteracy aspect to be assessed to a modernize way of teaching with this TPACK is seen as new knowledge that must be mastered by teachers to be able to integrate technology well in learning (Rahmadi, 2019).

The Technological Content Knowledge of a teacher considers as his knowledge about the reciprocal linking of technology with content (Spector et al., 2014). In other words, the modified lesson in the SpEd curriculum should have the integration of technology. Teachers Should not only master concepts but can teach these concepts to students using technology. Teachers who master the concept well will be able to map and simplify the concept so that it can help their students to understand it better (Liu and Lee, 2013).

Teachers should be knowledgeable the subject matter they teach and how to modify it withtechnology applications. In other words, technology can be a representative model for specific content (Schmidt et al., 2009). Teachers must understand which technology is the most appropriatefor a subject and how content determines or shapes the use of specific educational technologies, and vice versa (Harris et al., 2009).

The systematic way of teaching with the application of the technology is a consideration as an important aspect in our modern era. The employment of instructional technology in teaching and learning has become a crucial requirement among teachers and educators especially in 21st century education. Technological Pedagogical Knowledge, is knowledge of how various technologies can be used in teaching and can change teachers' way (Schmidt et al., 2009). This knowledge can be defined as an understanding of the use of technology to change the teaching and learning process in specific ways according to learning objectives and context (Mishra and Koehler, 2006; Harris et al., 2009).

The mastery of the subject matter and the pedagogy in teaching is the basic skills that a teacher should possess in an effective teaching and learning process. The pedagogical content knowledge combines pedagogical knowledge and content covering the teaching and learning process, curriculum, assessment, and pedagogy, knowing the teaching approach that fits certain content, how content elements are organized, well represented, and presented to students, knowledge of the causes of a complicated or comfortable topic to learn, to understand students' initial knowledge. Indicators of this aspect are learning strategies suitable for specific topics in mathematics, structured learning flow, causes of difficult or easy topics to learn, students' initial knowledge, curriculum, and assessment (Koehler et al., 2013).

The main objective of TPACK is to align technology with the subject matter and the delivery of teaching methods as a supplement to learning by Mishra and Koehler (2006). Occurs as a result of the purposeful integration of the technical expertise, informed pedagogy and command subject matter to create the best ways for the students to learn the lesson and demonstrate mastery of the standard.

The self-efficacy gives a significant understanding to the different aspects of SpEd teachersin practicing HyFlex teaching and the skill that they really possess in executing the different methods, strategies and techniques to address the needs of their learners using HyFlex teaching.

SpEd teachers' competency is the most important aspect to be assessed in the shift into HyFlex teaching.

Conceptualize teachers' ability as the teachers' beliefs or perceptions of their own competence at teaching, use of instructional strategies, and teaching effectiveness (Farley, 2019).The flexibility of teachers in accepting their weaknesses and follow up with their evaluation results(Alcantara et al., 2018) and skill for reflection and self-analysis (Griffith, 2016) are both necessaryto come up with a professional development plan that is fitted to their capacities and needs. Even classroom management and discipline matter inside the classroom are very important to address.

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

Difficulty in classroom management and discipline due to lack of practice and exposure to actual scenarios can be also part of the challenges (Cansiz and Cansiz, 2015).

TPACK can address the different individual student characteristics and goals on the content. SpEd teachers and Receiving teachers will just have to consider the appropriate technology to use based on the LSENs skill level. TPACK is a good solution in giving differentiated, active, engaging, and multisensory learning experiences.

With the gradual and consistent use of technology, LSENs, SpEd teachers and Receiving teachers will have a seamless weave in teaching and learning.

D. The Problem

1) Statement of the Problem

This research evaluated the competency level of teachers handling Learners with Special Needs (LSENs) as they integrate the Hybrid-Flexible (HyFlex) mode of teaching in Mandaue City Central Special Education School, Don Vincente Rama Memorial Elementary School-Sped Center, and Bantayan Central School-SpEd Center for the school year 2022-2023 as basis for the formulation of action plans.

Specifically, this study sought to answer the following problems:

a) What was the profile of the respondent as to the following:

- age and gender;
- civil status;
- highest educational attainment;
- number of years in teaching LSENs;
- type of classroom;
- disability type of students taught;
- number of LSENs in class; and
- relevant trainings/seminars/workshops?

b) What is the level of competency of the respondents in integrating the TPACK model into a HyFlex teaching and learning of students with special educational needs, in terms of:

- Technological Knowledge;
- Content Knowledge;
- Pedagogical Knowledge;
- Pedagogical Content Knowledge;
- Technological Pedagogical Knowledge;
- Technological Content Knowledge; and
- Technological Pedagogical Content Knowledge?

c) What are the challenges encountered by the respondents in the asynchronous and synchronous classes of learners with special educational needs?

d) Is there a significant relationship between the profile of the respondents and their level of competency in integrating the TPACK model into a HyFlex teaching and learning of LSENs?

e) Based on the findings, what action plan was proposed?

2) Null Hypothesis

The following hypothesis was tested at 0.05 level of significance.

Ho1: There is no significant relationship between the profile of the respondents and their level of competency in integrating the TPACK model into a HyFlex teaching and learning of LSENs.

Significance of the Study

Since this study involved level of competency of respondent-teachers integrating TPACKModel in HyFlex teaching, the results of this study benefited the following agencies or individuals.

Department of Education (DepEd). The DepEd division where this study was conductedhad the access of the findings or the results which can help them to decide if the division is readyto implement the HyFlex Teaching.

Bantayan Central Elementary School-SpEd Center, Don Vicente Rama Memorial Elementary School and Mandaue City Central Special Education School. These are the schools where the study shall be conducted. The teacher can assess their readiness in implementingthe HyFlex Teaching for the benefits of the learners.

School Administrators. The findings of the study will serve as a foundation in finding ways of enhancing the teaching strategies of the teachers to attain the individual needs of the learners by providing or delivering quality education in this new normal set-up.

SpEd Teachers. By the participation of the teachers, the result of the study can be a groundwork for them to enhance, develop and innovate new strategies and modalities in coping with the paradigm shift of education.

Receiving Teachers. By the participation of the teachers, the result of the studycan help them develop their ability when it comes to integrating TPACK Model in teaching both LSENs and regular students for an effective practice of inclusive education.

Learners with Special Educational Needs (LSENs). The ultimate beneficiaries of this study, it will be a hope for them that there will be an appropriate action from all the concerns about the readiness of the teachers to provide them a quality education using the HyFlex Teaching.

Parents. The partner of the teachers in developing the learners in their full potentials can also benefit the outcome of the study. It would motivate them to give full support to the programsand goals of the educational institution. The action that shall be taken for the development of the child is also a success of the parents.

Researchers. The findings will help the researchers determine the preparedness of teachersin HyFlex Teaching.

Moreover, the researchers can suggest possible teaching strategies and techniques in the transformation of the teaching process.

Future Researchers. The interested researchers can have a glimpse of this study. If they will conduct a similar study, it can be helpful for them and it can be used as their future reference.

E. Research Methodology

This section described and explained the research design, flow of the study, research environment, respondents, research instrument, data gathering procedure, and sampling procedure,and statistical treatment that were used in the study.

1) Design

This study employed the Quantitative Method as this entailed the teacher's competency inintegrating TPACK model into a HyFlex teaching and Learning of learners with special educational needs. The quantitative method used frequency, percentages, averages, and other relevant data and figures for computation.

2) Flow of the Study

The researchers followed the Input-Process-Output continuum. The Input was the Demographic profile of the SpEd teachers and receiving teacher, Level of competency of teacherin integrating the TPACK model into a HyFlex teaching and learning of LSENs, Significant difference between the respondent-teachers profile and their level of competency in integrating theTPACK model into a HyFlex teaching and learning of LSENs Challenges encountered by the respondent-teachers in the HyFlex classes of students with special educational needs.

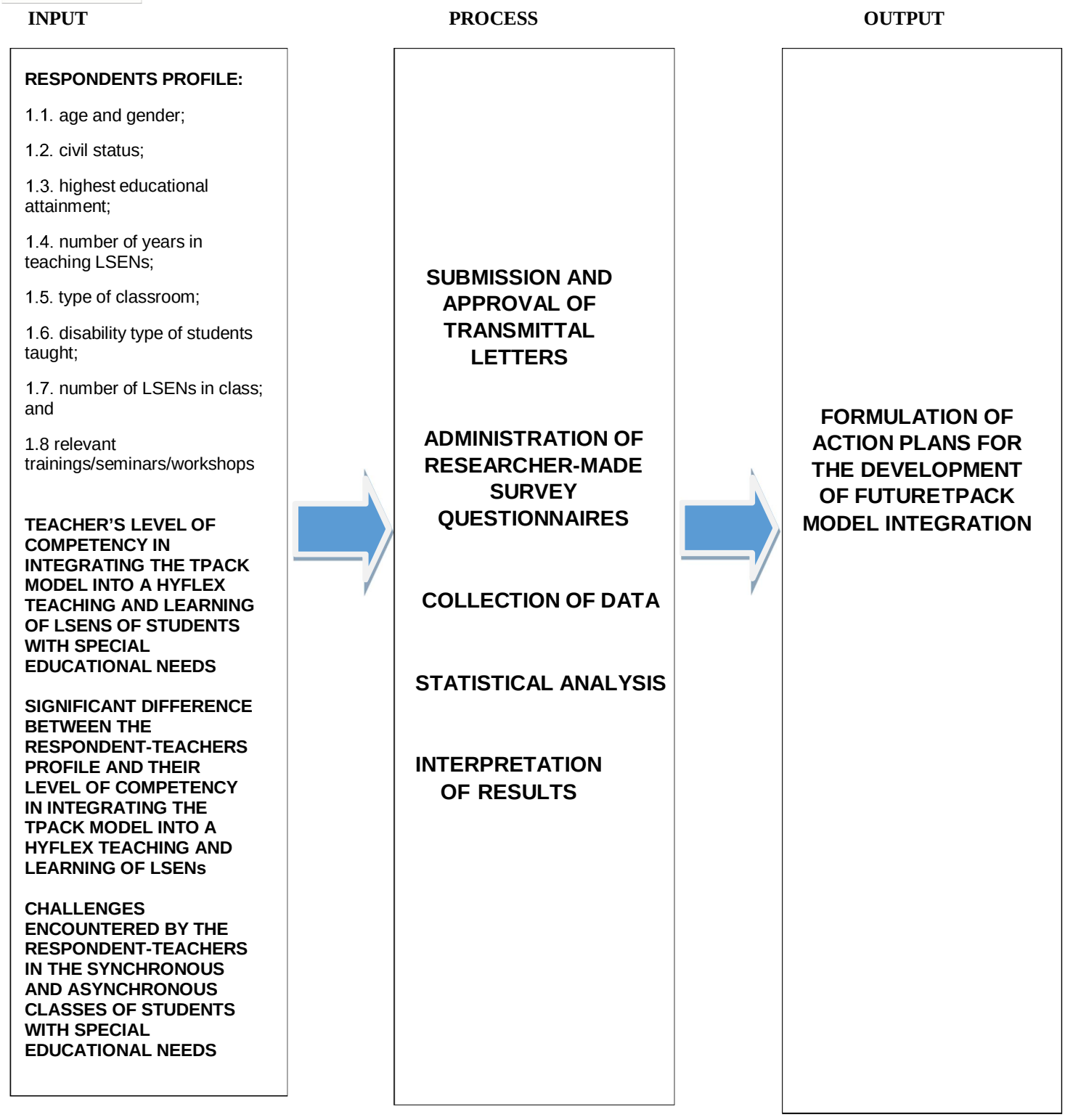

Figure 2. Flow of the Study

The Process started by submitting and seeking approval to the Schools Division Superintendent and School Heads to conduct the study, distribution of the researcher-made survey questionnaire to be facilitated and administered by the researchers. The data gathered shall be subjected to statistical treatment, analyses, and interpretation.

The Output of the study was to create action plans that will be based on the findings of thestudy. The researchers used it in Bantayan Central School- SpEd Center, Don Vicente Rama Memorial Elementary- SpEd Center School-Sped Center, and Mandaue City Central Special Education School and since then they practice blended learning with LSENs. As a school subjectof the study, the said school was chosen because the school head was willing to participate and teachers are willing to help the school community in terms of knowing hybrid and flexible learning.The researchers spoke with the school and verified that they do have SpEd centers with various disabilities.

3) Research Environment

This research was be conducted at three (3) different public schools namely: Bantayan Central Elementary School– SpEd Center at Bantayan Cebu with five (5) Special Education Teachers and six (6) Receiving teacher, Don Vicente Rama Memorial Elementary School- SpEd Center at Macopa St., Basak San Nicolas, Cebu City with five (5) Special Education Teachers andone (1) Receiving teacher,, and Mandaue City Central Special Education School which is located at CatalinoLl, Ouano Ave. with twenty-one (21) Special Education Teachers.

The said school was chosen because the researchers had a close location to the school. Theprincipal and the teachers were willing to participate to help the school community in terms of knowing the competency of SpEd and receiving teachers in integrating HyFlex teaching. The researchers had verified with the school that they had learners with various disabilities.

Mandaue City Central Special Education School with the School ID No. 312809.The school was established in the 1990s is considered as one of the oldest schools in Mandaue City.

Itis located along C, Ouano Street in central Mandaue City. The school's location is accessible to different establishments since it is surrounded by parks, malls, barangay halls, and different establishments. It is one of the public schools that caters to a large number of LSENs in MandaueCity Division.

There are more than one Thousand LSENs classified into: Intellectually Disability,Hearing Impairment, and Visually Impairment, including a special class for gifted and talented learners

This school was previously under Mandaue City Central Elementary School. There are 25 classrooms, 1 computer classroom, 1 learning resources room and 1 rehabilitation classroom that caters to learners that are under physical and occupational therapy. Mandaue City Central SpecialEducation also promotes and cultivates the skills of LSENs. They also have 1 classroom for culinary and pastry.

Don Vicente Rama Memorial Elementary School with School ID No. 119866 is one of thehuge public schools in Cebu City. The school mainly serves the entire portion of Basak San Nicolasand Basak Pardo. It was formerly known as Basak Elementary School and was changed to Don Vicente Rama Memorial Elementary School named after Vicente Rama, who was known as the “Father of Cebu City Charter”.

The center currently has five classrooms that cater to learners withIntellectual Disability and Hearing Impairment in which learners get programs and services like inclusion and mainstream.

The Bantayan Central Elementary School with the School ID No. 119048 is the 1st schoolin Bantayan Island who offered a special education program. It was established January 01 ,1915.

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

Figure 3. Location Maps of the Research Environment

4) Respondents

The total number of respondents was thirty-one (31) SpEd teachers and seven (7) ReceivingTeachers from three (3) public schools in the Province of Cebu. The respondents specifically handled LSENs namely: intellectual disability, visual impairment, hearing impairment, and for Mandaue City Central Special Education School, they handled Special classes for gifted learners.Twenty-one (21) Special Education Teachers from Mandaue City Central Special Education School, five (5) Special Education Teachers and 1 Receiving Teacher at Don Vicente Rama Memorial Elementary School- SpEd Center, and at Bantayan Central Elementary School-SpEd Center there are five (5) Special Education Teachers and six (6) Receiving Teachers.

The respondents went through a selection process for the qualitative part of the research survey. There were a total of 15 SpEd Teachers that participated in the qualitative survey. The criteria for this particular survey were a teacher should have 5 five years in teaching under SpEd program and must be 25 years old above. In Bantayan Central Elementary School- SpEd Center there were four (4) SpEd teachers in which two 2 teachers handles learners with HI, 1 teacher handles learners with ID and 1 teacher handles learners with VI. For Don Vicente Rama MemorialElementary School-SpEd Center, there were three (3) SpEd Teachers in which 2 teachers handleslearners with ID and 1 teacher handles learner with HI, and for the Mandaue City Special Education School there were eight (8) Sped Teachers in which 2 teachers per department that handles learners with ID, VI, HI and Gifted and talented.

Table 1.
Distribution of Respondents

Name of School	Total	Percentage
Mandaue City Cental Special Education School	21	55
Don Vicente Rama Memorial Elementary School- SpEd Center	6	16
Bantayan Central Elementary School- SpEd Center	11	29
TOTAL	38	100

Table 1 shows the distribution of respondents. It covers the name of the school where the study was conducted. Out of 38 respondents, 21 (55%) are from Mandaue City Central Special Education School, 11 (29%) are from Bantayan Central Elementary School-SpEd Center while 6 (16%) are from Don Vicente Rama Memorial Elementary School-SpEd Center.

5) Instrument

The study used an adapted research instrument from the research of Sonmez Pamuk, Mustafa Ergun, Recep Cakir, H. Bayram Yilmaz & Cemalettin Ayas (2015). The researchers of the study used the TPACK survey instrument.

Data were collected from the respondents or participants who had firsthand knowledge of/and experience in SpEd program using under the different modality of learning in Mandaue City Central Special Education School, Don Vicente Rama Memorial Elementary School, and Bantayan Central Elementary School.

The Part one (I) of the survey tool covered the demographic profile of the SpEd teachers such as the age and gender, civil status, highest educational attainment, number of years in teaching LSENs, type of classroom, exceptionalities handled, position, exceptionalities handled, number of LSENs in the classroom, and Total Hours of Trainings and Seminar attended related to Special Education Program. The Part two (II) of the survey tool measures the teacher's competency in handling LSENs using TPACK MODEL for HyFlex teaching. It was divided to seven (7) areas that measured the knowledge of the teachers in terms of: (A) Technological Knowledge; (B) Content Knowledge;

(C) Pedagogical Knowledge; (D) Pedagogical Content Knowledge; (E) Technological Pedagogical Knowledge; (F) Technological Content Knowledge; and (G) Technological Pedagogical Content Knowledge. Part three (III) of the survey to determine the challenges encountered by the teacher's respondent in the HyFlex classes of LSENs.

The instrument consists of items distributed into nine areas or domains related to the respondents' demographic profile, TPACK, and challenges encountered. In terms of scoring procedure, an adaptation was made using the 5 points Likert Scale ranging not competent to highly competent was reduced to a 4-point scale omitting one response and that was "neutral", followed the given equivalent for quantification: (4) highly competent; (3) competent; (2) less competent; and (1) not competent.

6) Validity of the Instrument

A pilot test was ran through the five selected respondents of the sample; three (3) was in Mandaue City Special Education School, one (1) in Don Vicente Rama Memorial Elementary School, and one (1) in Bantayan Central Elementary School. The reliability and validity of the research instrument was determined using a Cronbach's alpha with the size of 5 respondents that would generate a result ranging from 0.700 to 1.000 indicating that the research instrument was reliable, hence, it would be adapted for getting the desired information for the study. Any range below the said range would be subjected for revision and conduct of another pilot testing of the instrument.

7) Data Gathering Procedures

In the preparation of data gathering for this study, written permission from the School's Division Superintendent of Cebu Province, Cebu City, and Mandaue City Division will be requested. Another separate written permission is also secured by the researchers from the schoolheads of Mandaue City Special Education School, Don Vicente Rama Memorial Elementary School, and Bantayan Central Elementary School to be covered in this study. The letter emphasized the information as to the importance of the study and its purpose. After the request is granted, the researchers prepare the questionnaires for distribution. Toensure a better and accurate outcome, the questionnaires will be administered personally by the researchers by making certain of the directions as well as explaining to the respondents the purposeof the study. The researchers will further inform the respondents that their answers were kept with utmost confidentiality. After the data collection, it will be tabulated, collated, analyzed, and interpreted using the appropriate statistical treatment.

8) Ethical Consideration

It is important to establish trust with researcher participants; this was achieved by ensuringconfidentiality. The researchers held full accountability on the confidentiality of data gathered from the respondents. It was important that an approval had been gained before the commencementof data gathering, those who took part of the study was asked permission through an agreement letter. Assurance was given that any information gathered will be dealt with utmost confidentiality. This study was conducted with the outmost confidentiality of the respondents' information.Hence, the research abided the Data Privacy Act of 2012, an act protecting individual personal data in information and communications system in the government and the private sector.

9) Statistical Treatment

This study used the following statistical tools to analyze and interpret the data gathered: **Standard Deviation.** Used to measure to show how much variation from the mean exist. **Rank.** Used to determine a list of ordinal number of a value arranged in specified order.

1) Frequency. Used to determine or count the number of times that each variable in this studyoccurs, such as the number of males and females within the sample.

2) Percentage. Most commonly used to represent the statistics of a data. Percent simply means "per hundred". This will be used alongside a frequency count that corresponds to the part of a variable against the total number of variables.

3) Weighted Mean. Used to get the average of all of the respondents in a particular part of the research questionnaire. The overall weighted mean is the data needed to compute the correlation of the competency in integrating the TPACK model in HyFlex teaching.

4) Chi-Square Test of Independence. This formula is used to test the significant relationshipbetween the respondents' profile and their level of competency.

10) Scoring Procedure

Data obtained from the questionnaire will be scored and described according to the following:

Teachers Level of Competency in Integrating TPACK model into the Teaching and Learning of LSENs

Weight	ScoringRange	Verbal Description	Interpretation
4	3.25- 4.00	Demonstrates in depth proficiency level; is able to assist, consult or lead others in the application of a competency	Highly Competent
3	2.50 – 3.24	Demonstrates a working or functional proficiency level which enables the competency to be exercised effectively. (has working or functional command of the competency)	Competent
2	1.75 – 2.49	Demonstrates limited use of a competency and requires additional training to apply without assistance or frequent supervision	Less Competent
1	1.00 – 1.74	Demonstrates a minimal use of the competencyand is currently developing it	Not Competent

F. Definition Of Terms

To assist the readers, comprehend well this research, the following terms are defineconceptually and operationally defined, to wit:

Asynchronous. This refers to a self-based learning in which the teacher provides learningcontent that LSENs access in different time and location.

Content Knowledge. This refers the teacher's knowledge on a specific subject matter orfield of disciplines.

Face-to-Face Class (FTF). This refers to a personal interaction of LSENs and SpEdteachers in a physical environment after the low health restriction.

Flexible Teaching. This refers to a teacher in providing an activity that LSENs has thecontrol of their learning, time and mode of learning in different class settings.

Hybrid Teaching. This describes a combination of online and on-campus activities wherestudents may be able to participate in on-campus meetings, online meetings in their own time zone,or online meetings in another time zone.

HyFlex Teaching. This refers to a learner-centered model of class delivery that can be integrated online and offline instructions where learners with LSENs is given an opportunity to have a first-hand experience to the content on their own pace and developmental capabilities and progress

Inclusive Education. This refers to a program that gives a privilege to LSENs to receivedaccess to equal opportunity to education and learning.

Integrating. This refers in combining of TPACK MODEL in Hybrid Flexible in teachingand learning for LSENs.

Learners with Special Educational Needs (LSENs). This refers to thelegal term for students who required educational services and school practices.

Modalities of Learning. This refers to the different ways of learning in which learnerswith special educational needs acquire the content of the curriculum.

Pedagogical Content Knowledge. This refers to the implementation of generalpedagogical knowledge and experience in teaching and learning in the area of teaching.

Pedagogical Knowledge. It refers to the general goal of the specific knowledge to teach.

Special Education (SpEd). This refers to aspecialized instruction designed to meet the needs of learners with special educational needs.

SpEd Team. This refers to the professionals that help LSENs in a specific aspect of their developmental domain (cognitive, physical, socio-emotional, motor) e.g receiving teacher, shadowteacher, occupational therapist, physical therapist, SpEd teachers, parents and etc.

Synchronous. This refers to the teachers and LSENs attending classes together both onlineand face-to-face class.

Teachers Competency. This refers to the ability of a teacher to execute a high professionalskills and knowledge in teaching.

Technological Content Knowledge. This refers to the use of technology with the contentteachers teach.

Technological Knowledge. This refers understanding how to use computer software and hardware, presentation equipment, such as presentation documents, and other technologies in thecontext of education

Technological Pedagogical Content Knowledge. This refer to the use of technology in teaching.

Technological Pedagogical Knowledge. This refers to the use the technology to support the pedagogical approach.

II. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the results on the competency level of teachers handling LSENs as they integrate the Hybrid-Flexible (HyFlex) mode of teaching in the identified SpEd Centers, namely Mandaue City Central Special Education School, Don Vincente Rama Memorial Elementary School-SpEd Center, and Bantayan Central Elementary School-SpEd Center for the school year 2022-2023 as the basis for action plans.

Moreover, this research abided by the Data Privacy Act of 2012, *an act protecting individual personal data in information and communications system in the government and the private sector;* hence, all information provided by the participants was treated with utmost confidentiality.

A. Profile Of The Respondents From Bantayan Central ElementarySchool-Sped Center

Tables 2 and 3 present the results of the profile of the respondents.

Table 2
Profile of the Respondents from Bantayan Central Elementary School – SpEd Center
(n = 11)

	Frequency	Percentage
A. Age [in years]		
30 - 39	4	36.36
40 - 49	2	18.18
50 - 59	5	45.45
Mean : 45.55		
StDev : 8.31		
B. Gender		
Female	7	63.64
Male	4	36.36
C. Civil Status		
Married	8	72.73
Single	3	27.27
D. Highest Educational Attainment		
College Graduate	1	9.09
Masters Level	9	81.82
Masters Graduate	1	9.09
E. Number of Years in Teaching LSENs		
1 - 10	4	36.36
11 - 20	5	45.45
21 - 30	2	18.18
Mean : 15.27		
StDev : 6.42		

1) Age

Table 2 shows that about 45.45% of the respondents are aged 50 to 59. At the same time, the age brackets of 40 to 49 got the least number of respondents (2 respondents, 18.18%). Also, the table shows that the respondents' mean age is 45.55 years old, with a standard deviation of 8.31. The data imply that teachers are seasoned in handling LSENs in Bantayan Central Elementary School – SpEd Center. The simple interpretation of the data suggested that the teachers who are handling with LSENs are already an old pro in which they are dedicated for long years in handling LSENs. Teachers have lots of experiences through the years and they can able to handle the different needs of their learners. Furthermore, even the teachers are already seasoned in handling the LSENs, (Alshammari, 2013), found that there are lot of challenges faced by the teachers. Teachers have work overload, insufficient teaching tools, large numbers of the students in the classrooms and also the short length of time. Even if there are variety of reasons and challenges that the teachers have, (Adams, 1982) study found that changes across experience levels with the greatest changes between the first and third year of teaching. It shows that the challenges and the problems that aremostly experience is in just the beginning but if the teachers will be able to gain more experienceit is easier for the teachers to do the job as well as to adapt the ways on how to conquer any obstacles in handling students specially with the LSENs.

2) Gender

The table shows seven teacher respondents (63.64%) who were females and four teacher respondents (36.36%) who were males. The data imply that there were more female teacher respondents than male respondents. Thus, gender is equally important, they both provide the vital role in having a quality education in Hyflex teaching. Any gender are capable to teach and to learn as will, however according to (Scantlebury, 2009) there are strong gender role stereotypes for masculinity and femininity, for the students who do not match them can encounter problems with teachers and withtheir peers. In these case a teacher's rulings and choices can be impulsively triggered by the dynamic and unpredictable environment of a classroom (Fang, 1996). Teachers must impulse thatthe male and female has the same and equal opportunities.

Leyser and Tappendorf (2001), explains that the teachers have different attitudes towards inclusion or the "The Social Growth Factor". They revealed that female teachers had significantly higher scores than males. However, other study discovered that instructors' views toward inclusion did not significantly differ based on gender (Bek et al., 2009, Cagney, 2009, Seçer, 2011 and Çolak & Çetin, 2014).

3) Civil Status

The table shows eight teacher respondents (72.73%) were married, and three teacher respondents (27.27%) were single. The data imply that more teacher respondents are married thansingle respondents.

In line with the age of the respondents above, it gives an impact for respondent's civil status. Since, most of them that are already seasoned in service are now settling for having a married life. Based on the awareness, (Srivastava, 1979) discovered that single teachers were more aware of their professional responsibilities than their married counterparts. The factor that affect with this statement is that the unmarried teachers can focused in their duties and responsibilities as they can have focused in their carrier. But as the contradiction, according by (NCERT, 1971) and (Donga, 1987) found that the factor of teachers' marital status unrelated to their professional attitude and adjustment. It is on how the teacher are capable in managing the time between the home and the school.

4) Highest Educational Attainment

Table 2 shows nine teacher respondents (81.82%) who are Masters Level, while the CollegeGraduate and Masters Graduate have one teacher respondent, respectively. The data imply that more teacher respondents enrolled in master's programs to improve their educationalqualifications.

Educational qualification will not stop if the teacher graduated in his/her College Degree. Education is unending process; it does not stop. Master's program is significance. It will keep the teachers learn more and improve abilities in teaching. In the current educational environment, Special Education teachers are no longer solely responsible for teaching children with special needs. Teachers handling with regular students are encourage to enroll in Masteral degree and earned units in special education as a preparation for the inclusive education in Hyflex learning. The "least restrictive environment" (LRE) of the classroom in general education has been promoted as the optimal learning environment ever since the Individuals with Disabilities Education Improvement Act (IDEIA) was passed (O'Connor et al., 2016). This shift indicates thatthe educational paradigm has shifted toward inclusiveness and the development of HyFlex teaching, where teachers at all levels and curriculum areas are required to contact and collaborate on a regular basis with students with special needs (Saloviita, 2018; Turnbull, Turnbull, & Weymeyer, 2010; US Department of Education, 2012).

In line with this, in gaining the master's degree, the teacher would be aware the different ways and strategies on how to handle and interact not just the regular students but with also with LSENs. Across the globe, there has been a push for enrolling students with disabilities in general education classes across a variety of fields, not just education. Training and studying master's degree could be a great help for the teachers to improve skills as well as their ability to be up to date with the new trends or changes that happens in special education in regards with the differentmodes of teaching.

5) Number of Years in Teaching LSENs

The table shows five teacher respondents (45.45%) with 11 to 20 years of experience teaching LSENs. It also shows that four teacher respondents (36.36%) have 1 to 10 years of experience and two teacher respondents (18.18%) have 21 to 30 years of experience in teaching LSENs. Also, the table shows that the respondents' mean years in teaching LSENs is 15.27 years, with a standard deviation of 6.42. The data imply that more teacher respondents have teaching experience in LSENs of more than ten years.

The number of years of teaching will be also connected with the age of the respondents. The result shows that there are lot of teachers who found to stay in the service. With that, there isa Dep-ed order No.53, s. 28, Maximization of Trained teachers and administrators in Special education.

It would be helpful for the teachers handling special education to refresh and learning.The 10 years of service was enough to learn the different ways of handling and to apply the new mode of teaching and learning process. It provides learning to the teachers to be more effective inservice.

Table 3 presents the results of the profile of the respondents from Bantayan Central Elementary School-SpEd Center.

Table 3
Profile of the Respondents from Bantayan Central Elementary School- SpEd Center(n = 11)

	Frequency	Percentage
F. Type of Classroom		
Inclusive Setting	4	36.36
Self-Contained	7	63.64
G. Disability Type of Students Taught	Frequency	Rank
Intellectual Disability (ID)	4	1
Hearing Impairment (HI)	4	1
Autism Spectrum Disorder (ASD)	3	2
Orthopedic Disability (OD)	3	2
Visual Impairment (VI)	2	3
Emotional and Behavioral Disturbance (EBD)	1	4
Other Health Impairments	1	4
H. Number of LSENs in Class		
1 - 10	8	72.73
11 - 20	1	9.09
21 and above	2	18.18
Mean : 10.64		
StDev : 6.64		
I. Hours of Relevant Training/Seminars/ Workshop		
1 - 20	2	18.18
21 - 40	4	36.36
41 - 60	4	36.36
61 and above	1	9.09
Mean : 41.27		
StDev : 16.14		

6) Type of Classroom

The table shows that there were seven teacher respondents (63.64%) who are teaching in a Self-Contained classroom. Also, it shows four teacher respondents (36.36%) who teach in an Inclusive Setting classroom. The data imply that a self-contained classroom is a classroom wherea special education teacher is in charge of all academic subjects and is typically separated from general education classrooms within a neighborhood school. With the proper collaboration of SpEd teachers and Receiving teachers the inclusive setting classroom is very helpful to the LSENs. It gives opportunity to them that they would be included.The mainstreaming is helpful for the LSENs' to know on how socializing with their peers. Furthermore, without adequate orientation, (Kurawa, 2015) point out that teachers would not do much to support and help their LSENs; and that they also need instructional and technical skills to work with learners' diverse needs. The learners have a variety of needs as they are also unique, the proper replacement of the LSENs in the type of classroom they belong has a vital role in developing learner's ability and skills.

7) Disability Type of Students Taught

The table shows that Intellectual Disability and Hearing Impairment rank 1. Autism Spectrum Disorder and follow this Orthopedic Disability, rank 2. At the same time, Visual Impairment andEmotional and Behavioral Disturbance follows at rank 3. The data imply that disability labels canstigmatize, perpetuating false stereotypes that students with disabilities are less capable than theirpeers. In general, it is only appropriate to bring up the Disability when it is relevant to the situation. All the learners regardless of their disability has the right to be taught and to be educated. Republic Act (RA) 11650, inked by Duterte, March 11, it provides that no learner shall be denied admission based on their disability. It is applicable in all the schools, in eitherpublic or private. Hence, all the learners including LSENs has the capability to learn.

Theycan work as their piers but because of their disability there may be a delay. Benjamin Franklin says "Tell me and I forget. Teach me and I remember. Involve me and I learn. ''LSENs are all unique in their own ways, they have different ways on learning process. Theteachers have the vital role that would be helpful in order for the learners to achieve their full potentials. Regardless with the learner's disability, teachers must able to modify the lessons so that the learners would be able to learn and improve.Number of LSENs in Class

Table 3 shows eight teacher respondents (72.73%) handling 1 to 10 LSENs in a class. At the same time, two teacher respondents were handling 21 or more LSENs in a class. Also, the tableshows that the respondents' number of LSENs mean is 10.64 with a standard deviation of 6.64.

The data imply that the needs, capacities, and diverse circumstances of LSENs are carefully studiedand given special attention in the Philippines. The country's goal in implementing the basic education program is to equalize learning opportunities for all learners and produce holistically developed Filipinos in the long run.

Sec. Br. Armin A. Luistro of DepEd (2013) said, "If we work together, there is no excuses for not reaching our goals.'' Basically, based on the results the attention in special education is now noticeable, there are lots of training, activities, awareness, etc. that doing by the governmentto show that the LSENs are there and working for them. By the help of all the stakeholders there is a big possibility that we can continue to provide the needs of LSENs. Even during the COVID 19, as the response to the school closure, governments all over the world provided variety of solutions to ensure learning and instruction continuity, online, and/or broad cast remote learning and any variety of mode offered (Reimers and Schleicher, 2020).

8) Hours of Relevant Training/Seminars/Workshop

Table 3 shows four teacher respondents (36.36%) have attended 21 to 40 hours and 41 to60 hours of relevant training. This is followed by 1 to 20 hours (2 respondents, 18.18%) and morethan 60 hours (1 respondent, 9.09%). The data imply that teachers need more time to attend relevant training, seminars, and workshops to improve their teaching strategies in handling LSENs. Basically, the school belongs to the rural schools are having a less time and less opportunities in attending the different relevant training/seminars/workshop. The factors are dueto the limited access as well as the limited signal in the area to access the evolving ways or method of the process in attending the seminars. The importance of having these is for the teachers to learn the different methods and strategies on how to handle variety of learners. The ideal would be that a lot of this information is so well-integrated into your coursework, and you have multiple opportunities to practice what you've learn (Brownell, 2018).

B. Level Of Competency Of Teachers From Bantayan Central School In Integrating The Tpack Model Into Hyflex Teaching And LearningOf Sped Students

Tables 4 to 11 present the results of teachers' competency levels from Bantayan Central Elementary School- SpEd Center in integrating the TPACK Model into HyFlex teaching and learning.

1) Technological Knowledge

Table 4 presents the results on teachers' level of technological knowledge competency.

Table 4 Level of Competency of Teachers as toTechnological Knowledge
(n = 11)

Indicators	Mean	Interpretation
1.Can learn technology easily	3.09	Competent
2.Can easily solve some of the technical problems Iencounter	2.91	Competent
3.Know how to seek technology help	2.91	Competent
4.Have sufficient knowledge and experience with the mostrecent technologies	2.73	Competent
5.Can help my friends in their use of different technologies	2.73	Competent
6.Use different technologies regularly for different purposes(i.e., communication, typing, internet)	3.00	Competent
7.Try different technologies in my free time	2.73	Competent
Aggregate Mean:	2.87	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can learn technology easily” got the highest mean of 3.09 (Competent). In contrast, the indicators “Have sufficient knowledge and experience with the most recent technologies,” “Can help my friends in their use of different technologies,” and “Try different technologies in my free time” got the lowest mean of 2.73 (Competent). The data imply that *technology enhances a classroom with individual learning events, allowing SpEd teachers to provide greater flexibility and differentiation in teaching LSENs.*

Based on the result, it shows that the technology provides the teachers to become more skilled, flexible and productive. By the help of technology, it allows the learners to develop their own skills to the fully potential with the guidance of the teachers.

Technologies has a big impact and great help to provide and allowing the learners to gain the quality education they needed. Examples are, bug-in-ear coaching, when you have a lesson enactment, it offers real-time feedback (Elford et al., 2013; Rock et al., 2014), or by using annotated dashboards of (aggregated) where teachers can provide insights into whole -class and individual student progress (Visscher, 2017). With the help of this tools it allows teachers to facilitate the learning process in the flexible ways.

Based on the report, as the technology introduced in teaching and learning process, there are lots of positive effect happened in regards with student’s engagement, motivation and achievements. It has also a positive impact as the teachers doing the different methods and techniques in facilitating students’ learning (Apiola et al., 2011; Bebell and Kay, 2010; Cristia et al., 2017); Keengwe et al., 2012; Martino, 2010; Azmat et al., 2020; Azmat et al., 2021). LSENs are the most beneficial in terms of using the technology and they can able to develop their full potential by the helping hands of the teachers and the technological knowledge that teachers have.

2) Content Knowledge

Table 5 presents the results on teachers' level of content knowledge competency.

Table 5
Level of Competency of Teachers as toContent Knowledge
(n = 11)

Indicators	Mean	Interpretation
1.Have sufficient knowledge in my field	3.36	Highly Competent
2.Know basic concepts such as definitions in my field	3.36	Highly Competent
3.Understand the structure (organizations) of topics ofcontent I teach	3.27	Highly Competent
4.Can present the same subject matter at different levels	3.36	Highly Competent
5.Can explain background details of concepts and definitionsin my field	3.36	Highly Competent
6.Have adequate knowledge in explaining relations among different concepts on the subject matter	3.27	Highly Competent
7.Can make connections between the content I teach anddaily life	3.18	Competent
Aggregate Mean:	3.31	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators “Have sufficient knowledge in my field,” “Know basicconcepts such as definitions in my field,” “Can present the same subject matter at different levels,”and “Can explain background details of concepts and definitions in my field” got the highest meanof 3.36 (Highly Competent). In contrast, the indicator "Can make connections with content I teach,and daily life" got the lowest mean of 3.18 (Competent). The data imply that teachers, in this modern age, must be equipped enough to deal with all kinds of students, especially the ones withspecial needs.

Modern teachers or a digital age teacher can able to help the learners to develop their full potentials by using the brain-based learning research. It must be based on how the learners think or see things. In applying all the digital tools in teaching learning process, the teachers must be student centered and used holistic approach.

In an inclusive education the diversity of the learners is the issue worth addressing. The students varied in the different aspects, such as culture, gender, ethnic groups, rural populations, linguistic minorities, race, affected by HIV or AIDS and specially learners with special needs. According to Ministry of Education and Vocational Training (2019), inclusive education is a system of the education in which all the learners must be enrolled, disregards who they are and what they are. All learners must participate activities and all must be included. Regardless of learner's background, there must be no discrimination instead there must be minimization of the barriers and maximization of all the resources.

Teachers must knowledgeable enough and have the key focus on what is on the content. There must be a plan on what to tackle and the respective appropriate activities for the learners toattain the knowledge needed. In the other hand, (Clark, 2013), suggested that the 21st teachers must not just in academically or content prepared but technologically as well. As we now in the modern age in teaching it must be also with 21st century technologies.

3) Pedagogical Knowledge

Table 6 presents the results on teachers' level of pedagogical knowledge competency.

Table 6
Level of Competency of Teachers as toPedagogical Knowledge
(n = 11)

Indicators	Mean	Interpretation
1.Can use different approaches to teach	3.36	Highly Competent
2.Can select appropriate teaching styles for students from different backgrounds	3.36	Highly Competent
3.Can use a variety of tools (approaches) to assess students' learning	3.36	Highly Competent
4.Consider students' backgrounds, interests, motivation, andother needs in my teaching	3.64	Highly Competent
5.Can plan individual and group learning activitieseffectively	3.36	Highly Competent
6.Have knowledge of different pedagogies of teaching and learning	3.27	Highly Competent
7.Have knowledge of different components of teaching (i.e., instruction, assessment)	3.36	Highly Competent
Aggregate Mean:	3.39	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Consider students' backgrounds, interests, motivation, and other needs in my teaching" got the highest mean of 3.64 (Highly Competent). In contrast, the indicator "Have knowledge in different pedagogies of teaching and learning" got the lowest mean of 3.27 (Highly Competent). The statistics suggest that as teachers are the center of education, they should possess the skills and information necessary to pass on to their students. Effective instruction is done in a very individualized way. Teaching that is effective cares for the student's whole growth and who he is as a person. The teacher must take into account the unique characteristics of each of his or her students in order to modify the lesson plan accordingly.

Based on the results, teachers as the facilitator of learning must be well equip in thedifferent aspect in facilitating students learning. The teachers must recognize and assess the individual differences of each learner. It is for the teacher to facilitate, adjust or modify theinstructions that must give to the learners specially with the LSENs. There are lots of empiricalresearch has shown that the teachers have a biggest impact for the success and achievements ofthe learners. Teachers play the vital role in the teaching and learning process. Teachers are seemingthe drivers of the bus, they have the power to let the learners reach their destinations. Teachershave a lot of responsibilities that must take as the learners believing and trusting the teacher.

Teachers can motivate, enlighten, push and build rapport in the class, either it is online or face toface classes, by that the student can able to be motivated and have an eagerness to pursue learning. Pedagogical knowledge is very important; the content knowledge alone is insufficient. For example, when teachers' content knowledge controlled via direct assessment, higher levels of knowledge do not predict better student scores (Baumert et al., 2010). According to (Wayne andYoungs, 2003), the result should not be confused with those from effectiveness studies learninggains. As more and more researchers are beginning to conduct the empirical studies of teacher professionalism, the concept of general pedagogical knowledge as part of professional competence is becoming more important (Blomeke, et al., 2008; Kunter et al.,2013; Voss et. al., 2011). It isimportant the teachers are aware the individual differences of the learners to provide the appropriate instructions that suit to the learners.

4) Pedagogical Content Knowledge

Table 7 presents the results on teachers' level of pedagogical content knowledge competency.

Table 7
Level of Competency of Teachers as toPedagogical Content Knowledge
(n = 11)

Indicators	Mean	Interpretation
1.Can select teachable content of the subject matter appropriate to students' level	3.46	Highly Competent
2.Can teach the same subject matter to students at different levels	3.18	Competent
3.Can adjust my teaching according to the level of ease and difficulties with the learning of the specific subject matter	3.36	Highly Competent
4.Can use different methods and approaches to represent specific content	3.18	Competent
5.Can generate alternative teaching approaches according to students' levels	3.36	Highly Competent
6.Have sufficient knowledge in transforming students' misconceptions	3.27	Highly Competent
7.Can use analogies, examples, and demonstrations to support students' learning	3.37	Highly Competent
Aggregate Mean:	3.31	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Can select teachable content of the subject matter appropriate to students' level" got the highest mean of 3.46 (Highly Competent). In contrast, the indicators "Can teach the same subject matter to students at different levels" and "Can use differentmethods and approaches to represent specific content" got the lowest mean of 3.18 (Competent). The findings suggest that teachers always perform a variety of important functions in the classroom. Teachers are viewed as the source of light in the classroom. Teachers are entrusted with many responsibilities ranging from very simple to most complex and challenging jobs.

Teachers play the essential roles in the classroom. They are not just there to teach but to facilitate the learning. According to Winter (2007), effective teachers encourage students in active learning, it includes, debating, discussing, writing evaluating, reading information etc. Learning without the active participation of the learners will not be effective since it may in the short-term memory of the learners. As a teacher you must considered that you are the light of the classroom and let that light brings not just inside of the classroom but as they go ahead. Teachers must providethe answer on confusion of the students may have on their mind, considering the LSENs the teachermust be able to help the learners to be independent and to sustain the long-term goals.

It is on how the knowledge is being organized and used to give impact to the learners. It is not necessarily about the quality or quantity of teachers' subject matter knowledge. The teachersare capable to view things beyond with their scope. The mastery of the teachers in the specific subject will not make the learners gain the full access of knowledge. Somehow, if the teachers have the power to organize and used the subject for the development of the learners it gives the big impact. The application of pedagogical content knowledge is a form of knowledge that makesscience teachers teach rather than scientists (Gudmundsdottir, 1987).

In spite of the fact that scientists are the subject-matter experts, teachers differ from them in how their knowledge is arranged and used. Because it requires teachers' abilities to present the conceptual approach, relational understanding, and adaptive reasoning of the subject matter, pedagogical content knowledge plays a crucial part in the process of teaching and learning (Kathirveloo et al., 2014).

5) Technological Pedagogical Knowledge

Table 8 presents the results on teachers' technological pedagogical knowledge competency level.

Table 8
Level of Competency of Teachers as toTechnological Pedagogical Knowledge(n = 11)

Indicators	Mean	Interpretation
1.Can use technology to assess student's learning	3.00	Competent
2.Can use technology to identify individual differences among students	3.00	Competent
3.Can use technology to advance my teaching and students' learning	2.91	Competent
4.Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom	2.91	Competent
5.Can use technology to enrich different components (i.e., lecturing, examples, and assessment) of teaching activity	3.00	Competent
6.Can use technology to engage students with content	2.91	Competent
7.Can use technology to generate alternative approaches to teaching components (i.e., teaching, assessment,presentation, motivation)	2.91	Competent
Aggregate Mean:	2.95	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Can use technology to assess student's learning," "Can use technology to identify individual differences among students," and "Can use technology to enrich different components of teaching activity" got the highest mean of 3.00 (Competent). In contrast, the indicators "Can use technology to advance my teaching and students' learning," "Can use technology to bring students' differences into the classroom," "Can use technology to engage students with content," and "Can use technology to generate alternative approaches to teaching components" got the lowest mean of 2.91 (Competent). The data imply that it is essential that teachers need to understand the need to be motivated in doing their work well to have motivated learners in the classroom through the use of technology. When students are motivated, then learning will quickly take place.

Based on the results, motivation is the key to achieved the goal for the students to learn quickly by the help of the technology. Using of technology, the teachers must be aware the different ways and strategies for the learners to be motivated and eager to do and to learn more. There are lots of activities that the technologies provide for the learners to be interested or motivated. According to (Livare et al., 2020), since we've experience the COVID 19 crisis, it makes the schools and education motivated to engaged the transformation in using the technology in teaching and learning process. In Bantayan Central Elementary School – SpEd Center specially with the LSENs., it is hard to let the students be engaged in the transforming process due to the limited source of the technology and the awareness as well. As reported by (Dodong et al., 2016), there are most developing countries including the Philippines experiencing the barriers of integration education technology it is due to the insufficient financial assistance, structural capability, human resources, management support as well as the behavioral factors.

When the learners are capable to the tasks and realize that the technology is user friendly, it will benefit the process of instruction and learning more convenient and meaningful as the students canlearn more and quickly as they are enjoying the learning process.

6) Technological Content Knowledge

Table 9 presents teachers' level of technological content knowledge competency.

Table 9
Level of Competency of Teachers as toTechnological Content Knowledge
(n = 11)

Indicators	Mean	Interpretation
1.Can use technology to present the content in different ways	3.00	Competent
2.Can use technology to enrich the content	3.00	Competent
3.Can use technology to demonstrate unobservable facts, concepts, and principles of the content	2.91	Competent
4.Can use technology to access additional resources about content that may otherwise not be available	3.09	Competent
5.Can use technology to provide students with opportunities to explore content by themselves on their individual pave	2.82	Competent
6.Can use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters	3.00	Competent
7.Can use technology in teaching to provide different forms of content	2.73	Competent
Aggregate Mean:	2.94	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can use technology to access additional resources aboutcontent that may otherwise not be available” got the highest mean of 3.09 (Competent). In contrast, the indicator “Can use technology in teaching to provide different forms of content” got the lowest mean of 2.73 (Competent). The data imply that teachers can use technology to offer various learning opportunities and approaches that engage, instruct, and support LSENs with various tactics designed to appeal to individual learners. No longer are learners stuck in a classroom theydo not understand, trying to learn at a pace they cannot keep up with or participate in.

As teachers engaged the students in the learning environment with the help of technology it provides opportunities for a sense of community, accessibility, support, encouragement and interest in learning and self-adjusting (Bond and Bedenlier, 2019). Supported by Hyden (2005), there are several studies that technology identified that have lots of benefits such as keeping students in touch and engaged. Also, the Power Point and multimedia are helping students to follow the lectures (Lauricella and Kay, 2010). It is very helpful for the student with LSENs as theyhave the low attention span. Bantayan Central Elementary School – SpEd Center has the challenges in terms of this letting the students be more engaged in technology. Hence, there is noenough available technologies being provided.

7) Technological Pedagogical Content Knowledge

Table 10 presents the results on teachers' level of technological pedagogical content knowledge competency.

Table 10
Level of Competency of Teachers as to Technological Pedagogical Content Knowledge(n = 11)

Indicators	Mean	Interpretation
1.Can use technology in teaching the specific content withinthe defined pedagogical approach in a given context	2.91	Competent
2.Can use technology in such a way that students feel itspositive impact on their learning of the specific subjectmatter	2.82	Competent
3.Can use technology to organize my teaching and students'learning specific content	2.91	Competent
4.Can use technology to bring real-life experiences,examples, and analogies about specific content	2.91	Competent
5.Can use technology to identify learners' differences in anunderstanding of the content	2.82	Competent
6.Can use technology to make specific subject matter comprehensible to students from different backgrounds	2.82	Competent
7.Can use technology to provide opportunities to teachstudents in the classroom to contribute to learning activities related to specific content	2.91	Competent
Aggregate Mean:	2.87	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Can use technology in teaching the specific content within the defined pedagogical approach in a given context," "Can use technology to organize my teaching and students' learning specific content," and "Can use technology to bring real-life experiences, examples, and analogies about specific content," and "Can use technology to provideopportunities to teach students in the classroom to contribute to learning activity related to specific content" got the highest mean of 2.91 (Competent). In contrast, the indicators "Can use technologyin such a way that students feel its positive impact in their learning of the specific subject matter," "Can use technology to identify learners' differences in an understanding of the content," and "Canuse technology to make specific subject matter comprehensible by students from different backgrounds" got the lowest mean of 2.82 (Competent). The data imply that the teacher must have sufficient knowledge of the curriculum's goals and standards, as well as teaching aptitude, interests, and principles. Teachers must exert effort to lead LSENs into a meaningful, full, stimulating, and satisfying life.

Learning is being influenced by the change of time, as well as the skills, the teachers as the facilitator of learning are the greatest influencer. West et al. (2019) supported that as a teacher it is essential that you have an instructional competency and to give and effective instructions to students it is maximize knowledge and skill acquisition. Teachers need to modify the delivery of instructions because learners require approach to adapt the instructions given.

8) Summary Table

Table 11
Summary Table on the Level of Competency of Teachers(n = 11)

Indicators	Mean	Interpretation
A.Technological Knowledge	2.87	Competent
B.Content Knowledge	3.31	Highly Competent
C.Pedagogical Knowledge	3.39	Highly Competent
D.Pedagogical Content Knowledge	3.31	Highly Competent
E.Technological Pedagogical Knowledge	2.95	Competent
F.Technological Content Knowledge	2.94	Competent
G.Technological Pedagogical Content Knowledge	2.87	Competent
Aggregate Mean:	3.09	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

Table 11 presents the summary table's results on teachers' competency levels. The table shows that the teachers' competency in pedagogical knowledge got the highest mean of 3.39 (Highly Competent). In contrast, their competencies in technological knowledge and technologicalpedagogical content knowledge got the lowest mean of 2.87 (Competent).

C. Challenges Encountered By Teachers In TheAsynchronous And Synchronous Classes

Table 12 presents the challenges of teachers in handling LSENs using the Asynchronous and Synchronous modes.

Table 12
Respondents' Challenges in the Asynchronous and Synchronous Classes
(n = 11)

Indicators	Frequency	Rank
1.Lack of network connectivity	9	1
2.Heavy workload due to home and school activity	9	1
3.Bulky course content for a modular setup	6	2
4.Lack of technical materials and equipment	6	2
5.Mental stress due to pandemic	6	2
6.Student lack of interest	4	3
7.Lack of personal motivation	4	3
8.Lack of skills and knowledge in manipulating technology base materials and equipment	3	4
9.Lack of engagement and interaction with LSENs	3	4
10.Delay in the timing of the lecture	2	5
11.Lack of enough resources	2	5
12.Poor classroom management	1	6
13.Poor time management	1	6

The table shows the *Lack of network connectivity*, and *heavy workload due to home and school activity* ranks 1. This is followed by *Bulky course content for modular setup, Lack of technical materials and equipment*, and *Mental stress due to the pandemic* at rank 2. The statistics suggest that teachers need to be aware of the complexity and diversity present in the classroom, including issues of race, gender, culture, linguistic proficiency, and hobbies. All of these factors primarily affect how well students perform and learn in class. Diversity in the classroom is present not only among students and their peers, but may also be made worse by linguistic and cultural barriers between teachers and students.

Based on the result, the lack of network of connectivity and heavy workload due to home and school activity, both are challenges encountered by teachers in the asynchronous and synchronous classes in Bantayan Central Elementary School-SpEd Center. The lack of network ofconnectivity is a national problem in the Philippines (Chiu et al., 2017). The Philippines' slow Internet connection is a result of out-of-date Philippine law and bureaucracy, which slow down the speedy installation of cell towers, claim Natividad (2021) and Salac and Kim (2016). The heavy workload due to home and school activity as cited in Rosanes (2020), teaching workloads can include time pressure, performance pressure, poor student motivation, challenging professional and parent-teacher relationships, and decreasing autonomy in the workplace. With this duties andresponsibilities added to the teachers has a negative impact in teaching performance. Based on the result of data, the diversity and complexity in the classroom must be recognize. By recognizing the diversity of learners can make the learning and teaching process more effective. In Bantayan Central Elementary School- SpEd Center as the teachers able to recognize the diversity of learners and can assist their own ways of teaching and communication, it can be a wayto improve the teaching learning process in the school and be ready for the changing world of education.

D. Test Of Significant Relationship

The study hypothesized that the teachers' level of competencies in integrating the TPACKModel into HyFlex Teaching and Learning have significant relationships with their profiles. Table13 shows the results.

Table 13
Relationship Between the Respondents' Level of Competency in Integrating TPACK Modelinto HyFlex Teaching and Learning and their Profiles
(alpha = 0.05)

Variables	Chi- Square	Df	Critical Value	SignificanceResult
Level of Competency and				
Age	3.822	4	9.488	Not significantHo accepted
Gender	1.493	2	5.991	Not significantHo accepted
Civil Status	0.665	2	5.991	Not significantHo accepted
Highest Educational Attainment	3.056	4	9.488	Not significantHo accepted
No. of Years in Teaching LSENs	6.847	4	9.488	Not significantHo accepted
Type of Classroom	3.654	2	5.991	Not significantHo accepted
No. of LSENs in class	5.225	4	9.488	Not significantHo accepted
Relevant Training/Seminars/Workshops	4.675	6	12.592	Not significantHo accepted

The table shows that the teachers' profiles (age, gender, civil status, highest educational attainment, number of years in teaching LSENs, type of classroom, number of LSENs in class, andrelevant training, seminars, and workshop attended) do not have significant relationships with each other. The computed Chi-square values are significantly lower than their respective critical values. Thus, the null hypothesis was accepted. That is, their competency level has significant relationships with their profiles.

E. Profile Of The Respondents From Don Vicente Rama Memorial Elementary School-Sped Center

Tables 14 and 15 present the results of the profile of the respondents.

Table 14
Profile of the Respondents from
Don Vicente Rama Memorial Elementary School-Sped Center(n = 6)

	Frequency	Percentage
A. Age [in years]		
21 - 29	1	16.67
30 - 39	1	16.67
40 - 49	4	66.67
Mean : 41.00		
StDev : 7.35		
B. Gender		
Female	4	66.67
Male	2	33.33
C. Civil Status		
Married	6	100.00
D. Highest Educational Attainment		
Masters Level	4	66.67
Masters Graduate	0	0.00
Doctoral Level	2	33.33
E. Number of Years in Teaching LSENs		
1 - 10	3	50.00
11 - 20	3	50.00
Mean : 9.83		
StDev : 7.78		

1) Age

Table 14 shows that about 66.67% of the respondents are aged 40 to 49. At the same time,the age brackets of 21 to 29 and 30 to 39 got the least number of respondents (1 respondent, 16.16%). Also, the table shows that the respondents' mean age is 41.00 years old, with a standarddeviation of 7.35. The data imply that that teachers are seasoned in handling LSENs in Don VicenteRama Memorial Elementary School Sped-Center. According to the study of (Martin and Smith, 1990), middle aged teachers were found to be more effective than the young and old teacher. This idea was supported by Zafer and Aslihan (2012) who also found out that older teachers of age 41 years old are more effective in teaching and good in classroom management skills this is because younger teachers are more prone to making risky decisions and do not analyze the context of student discipline because of lack of experience and immaturity (Aloka and Bojuwoye, 2013).

2) Gender

The table shows four female teacher respondents (66.67%) and two male teacher respondents (33.33%). The data imply that there were more female teacher respondents than malerespondents.

Teaching profession is a career path for women back in the 1800's. Long before the publicschools were established, women were expected to teach the children in math, language, science,etc. During the establishment of the public schools, women were asked to teach because of their natural nurturing ability to discipline young children.

3) Civil Status

The table shows that all teacher respondents (100.00%) were married. The data imply thatall of the teacher respondents are married. According to (Ayeop, 2003), teachers who are marriedhave higher satisfaction in their job. Teachers value the word commitment to their profession andto their students who need special attention. As a parent or future parent, they became more caringand thoughtful of their students and their job.

4) Highest Educational Attainment

Table 14 shows four teacher respondents (66.67%) who are Masters Level, while the Doctoral Level has two teacher respondents (33.33%). The data imply that more teacher respondents enrolled in master's programs to improve their educational qualifications.

Graduates of all teacher preparation programs require and receive further support in their professional preparation after graduating from their program through professional development available to all teachers or through specialized supports made available to new teachers (Maynes & Hatt, 2015). This is an assurance that our teachers are prepared in managing challenging tasks.**Number of**

5) Years in Teaching LSENs

The table shows three teacher respondents (50.00%) with 1 to 10 and 11 to 20 years of experience teaching LSENs. Also, the table shows that the respondents' mean years in teaching LSENs is 9.83 years, with a standard deviation of 7.78. The data imply that half of the teacher respondents have teaching experience in LSENs of less than ten years and half have more than tenyears of teaching experience in LSENs. Kini and Podolsky (2016) found out that teachers who gain more teaching experiences becomes effective towards helping with the student's achievement. As a teacher gains experience,they have a greater rate of support system towards their students, well prepared in the workforce,and become more competent to expand in their career and mentors and coach new teachers. Table 15 presents the results of the profile of the respondents from Don Vicente Rama Central School.

F. Profile Of The Respondents From Don Vicente Rama Memorial Elementary School-Sped Center

Table 15
Profile of the Respondents from Don Vicente Rama Central School(n = 6)

	Frequency	Percentage
F. Type of Classroom		
Inclusive Setting	1	16.67
Self-Contained	5	83.33
G. Disability Type of Students Taught	Frequency	Rank
Intellectual Disability (ID)	3	1
Hearing Impairment (HI)	2	2

Autism Spectrum Disorder (ASD)		1	3
H. Number of LSENs in Class			
1 - 10		3	50.00
11 - 20		3	50.00
	Mean : 10.17 StDev : 5.49		
I. Hours of Relevant Training/Seminars/ Workshop			
1 - 20		1	16.67
21 - 40		2	33.33
41 - 60		1	16.67
61 and above		2	33.33
Mean : 68.30 StDev : 53.10			

1) Type of Classroom

The table shows that there were five teacher respondents (83.33%) who are teaching in a Self-Contained classroom. Also, it shows one teacher respondent (16.67%) who teaches in an Inclusive Setting classroom.

Storey (2007) states that, “although schools often advocate multiculturalism and acceptance of differences, disability and ableism are overlooked in this advocacy”. Most of the teachers conduct one on one instruction or small group instruction because of the disability of thestudent. Teachers need to develop the needed skills especially the behavior before they can pass to group class much more inclusive education.

2) Disability Type of Students Taught

The table shows that Intellectual Disability ranks 1. Hearing Impairment follows this ranks2, and Autism Spectrum Disorder ranks 3. The school offers teaching learners with Intellectual Disability and Hearing Impairment. The pandemic caused the increased of learners of students with Intellectual Disability in kindergarten and primary level. Learners with Hearing Impairment has less enrollees because most of the students already graduated and are now in the secondary level. Some learners with Intellectual Disability are assessed with Autism Spectrum Disorder.

3) Number of LSENs in Class

Table 15 shows three teacher respondents (50.00%) handling 1 to 10 and 11 to 20 LSENsin a class. Also, the table shows that the respondents’ number of LSENs mean is 10.17 with a standard deviation of 5.49. Students in SpEd class becomes inconsistent in numbers depending onthe area, accessibility, and disability catered in the school. Some teachers have less students because many schools are adopting inclusion than self-contained.

4) Hours of Relevant Training/Seminars/Workshop

Table 15 shows that two teacher respondents (33.33%) have attended 21 to 40 hours and 61 or more hours of relevant training. This is followed by 1 to 20 hours and 41 to 60 with one respondent in each category. Uche (1981) stressed that to facilitate and maximize the use of discovered new skills of teaching, teachers should undergo in-service training.

G. Level Of Competency Of Teachers From Don Vicente Rama Memorial Elementary School - Sped Center In Integrating The Tpack Model Into Hyflex Teaching And Learning Of Lsens

Tables 16 to 23 present the results of teachers' competency levels from Don Vicente Rama Memorial School-Sped Center in integrating the TPACK Method into HyFlex teaching and learning of LSENs

1) Technological Knowledge

Table 16 presents the results on teachers' level of technological knowledge competency.

Table 16
Level of Competency of Teachers as toTechnological Knowledge
(n = 6)

Indicators	Mean	Interpretation
1.Can learn technology easily	3.17	Competent
2.Can easily solve some of the technical problems I encounter	2.83	Competent
3.Know how to seek technology help	3.00	Competent
4.Have sufficient knowledge and experience with the most recent technologies	2.67	Competent
5.Can help my friends in their use of different technologies	3.00	Competent
6.Use different technologies regularly for different purposes (i.e., communication, typing, internet)	3.00	Competent
7.Try different technologies in my free time	3.00	Competent
Aggregate Mean :	2.95	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can learn technology easily” got the highest mean of 3.17 (Competent). In contrast, the indicator “Have sufficient knowledge and experience with the most recent technologies” got the lowest mean of 2.67 (Competent). The data imply that technology can help teachers improve their teaching strategies quickly in handling LSENs. With the right technology, teachers can develop and manage compliant, high-quality SpEd documents using intuitive guided actions and rules. Reporting functionality can help manage compliance,
identifying timelines and which teachers are on track or have fallen behind. Technology can alsohelp teachers run required state and district reports and send data directly to relevant governmentagencies if allowed.
The 21st century learner and learning environments have changed with the advent of technology because of the integration of technology in the curriculum. Learners and teachers of the 21st century is expected that information be accessible, instantaneous, and multidimensional (Prensky, 2001).

2) Content Knowledge
Table 17 presents the results on teachers' level of content knowledge competency.

Table 17
Level of Competency of Teachers as toContent Knowledge
(n = 6)

Indicators	Mean	Interpretation
1.Have sufficient knowledge in my field	3.17	Competent
2.Know basic concepts such as definitions in my field	3.33	Competent
3.Understand the structure (organizations) of topics of content I teach	3.17	Competent
4.Can present the same subject matter at different levels	3.17	Competent
5.Can explain background details of concepts and definitions in my field	3.00	Competent
6.Have adequate knowledge in explaining relations among different concepts on the subject matter	3.17	Competent
7.Can make connections between the content I teach and daily life	3.17	Competent
Aggregate Mean :	3.17	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Know basic concepts such as definitions in my field" got the highest mean of 3.33 (Highly Competent). In contrast, the indicator "Can explain background details of concepts and definitions in my field" got the lowest mean of 3.00 (Competent). The data imply that teachers have basic knowledge of the field of special education.To meet its definition, the education given to LSENs must entail specialized, individualized instruction with placement in the least restrictive environment. As a result of the paradigm shift, educators are now expected to regularly contact and collaborate with kids who have special needs across all grade levels and curriculum areas (Saloviita et al.,2018).

3) Pedagogical Knowledge

Table 18 presents the results on teachers' level of pedagogical knowledge competency.

Table 18
Level of Competency of Teachers as toPedagogical Knowledge
(n = 6)

Indicators	Mean	Interpretation
1.Can use different approaches to teach	3.17	Competent
2.Can select appropriate teaching styles for students from different backgrounds	3.17	Competent
3.Can use a variety of tools (approaches) to assess students'learning	3.17	Competent
4.Consider students' backgrounds, interests, motivation, and other needs in my teaching	3.33	Highly Competent
5.Can plan individual and group learning activities effectively	3.17	Competent
6.Have knowledge of different pedagogies of teaching and learning	3.17	Competent
7.Have knowledge of different components of teaching (i.e., instruction, assessment)	3.17	Competent
Aggregate Mean :	3.19	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Consider students' backgrounds, interests, motivation,and other needs in my teaching" got the highest mean of 3.33 (Highly Competent). In contrast, theremaining indicators got the lowest mean of 3.17 (Competent). The data imply that fostering LSENs' motivation is a complex but necessary aspect of teaching that teachers must consider. Numerous teachers may have taken charge of groups of LSENs who were enthusiastic, engaged, and eager to learn, but they may also have handled groups of disengaged, indifferent students.

According to Shulmans (1986), teachers became creative and develop ways when they engage in discussion. The knowledge of a teacher provides the knowledge about content, students,and interaction within the school.

4) Pedagogical Content Knowledge

Table 19 presents the results on teachers' level of pedagogical content knowledge competency.

Table 19
Level of Competency of Teachers as toPedagogical Content Knowledge
(n = 6)

Indicators	Mean	Interpretation
1.Can select teachable content of the subject matter appropriate to students' level	3.00	Competent
2.Can teach the same subject matter to students at different levels	3.33	Highly Competent
3.Can adjust my teaching according to the level of ease and difficulties with the learning of the specific subject matter	3.33	Highly Competent
4.Can use different methods and approaches to represent specific content	3.17	Competent
5.Can generate alternative teaching approaches according to students' levels	3.17	Competent
6.Have sufficient knowledge in transforming students' misconceptions	3.00	Competent
7.Can use analogies, examples, and demonstrations to support students' learning	3.00	Competent
Aggregate Mean:	3.14	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Can teach the same subject matter to students at different levels" and "Can adjust my teaching according to the level of ease and difficulties with the learning of specific subject matter" got the highest mean of 3.33 (Highly Competent). In contrast, the indicators "Can select teachable content of the subject matter appropriate to students' level," "Have sufficient knowledge in transforming students' misconceptions," and "Can use analogies, examples, and demonstrations to support students' learning" got the lowest mean of 3.00 (Competent). The data imply that teachers can afford to be one topic ahead of the LSENs in their teaching. Teachers can use their subject knowledge to organize and use content knowledge more effectively for their LSENs to understand. In addition, teachers are more likely to be able to respond to the needs of any particular classroom, recognizing LSENs who are struggling and changing the way the information is presented in order to make it more understandable. Pedagogical content knowledge is an important competency as a teacher to engage examples and non-examples and to explain, clarify, and expose students to complex opportunitiesto consider consolidations and applications. Maynes and Hatt (2015) elaborated that strong pedagogical content knowledge allows teachers to differentiate effectively because they can provide variations within the scope of central ideas to respond to students' interests, learning profiles, prior learning, and readiness.

5) Technological Pedagogical Knowledge

Table 20 presents the results on teachers' technological pedagogical knowledge competency level.

Table 20
Level of Competency of Teachers as toTechnological Pedagogical Knowledge(n = 6)

Indicators	Mean	Interpretation
1.Can use technology to assess student's learning	3.00	Competent
2.Can use technology to identify individual differencesamong students	3.00	Competent
3.Can use technology to advance my teaching and students' learning	3.17	Competent
4.Can use technology to bring students' differences (learning preferences, content background, academic level) into theclassroom	3.17	Competent
5.Can use technology to enrich different components (i.e., lecturing, examples, and assessment) of teaching activity	3.00	Competent
6.Can use technology to engage students with content	3.00	Competent
7.Can use technology to generate alternative approaches toteaching components (i.e., teaching, assessment, presentation, motivation)	3.17	Competent
Aggregate Mean:	3.07	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows the indicators "Can use technology to advance my teaching and students' learning," "Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom," and "Can use technology to generate alternative approaches to teaching components (i.e., teaching, assessment, presentation, motivation)" got thehighest mean of 3.17 (Competent). In contrast, the indicators "Can use technology to assess student's learning," "Can use technology to identify individual differences among students," and"Can use technology to enrich different components (i.e., lecturing, examples, and assessment) of teaching activity," and "Can use technology to engage students with content" got the lowest mean of 3.00 (Competent). The data imply that as technology drives globalization and digitaltransformation, teachers can help LSENs acquire the necessary skills to succeed in future careers.

Teachers are responsible to integrate technology in Special Education because they need to be competent in using technology in education. Demirok and Baglama (2018) states that technology needs to be integrated into special education environments for individuals with special needs to use and increase their existing potentials and gain essential skills to maintain their lives more independently.

6) Technological Content Knowledge

Table 21 presents teachers' level of technological content knowledge competency.

Table 21
Level of Competency of Teachers as toTechnological Content Knowledge
(n = 6)

Indicators	Mean	Interpretation
1.Can use technology to present the content in different ways	3.17	Competent
2.Can use technology to enrich the content	3.17	Competent
3.Can use technology to demonstrate unobservable facts, concepts, and principles of the content	3.17	Competent
4.Can use technology to access additional resources about content that may otherwise not be available	3.17	Competent
5.Can use technology to provide students with opportunities to explore content by themselves on their individual pave	3.17	Competent
6.Can use technology to support students in deeper inquiryabout the content, concepts, and relationships with other subject matters	3.00	Competent
7.Can use technology in teaching to provide different forms of content	3.17	Competent
Aggregate Mean:	3.15	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that all indicators got the highest mean of 3.17 (Competent) except the indicator “Can use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters," which got the lowest mean of 3.00 (Competent). Online learning can be a highly effective instructional tool for teachers by integrating technology into existing curricula instead of using it solely as a crisis-management tool.

7) Technological Pedagogical Content Knowledge

Table 16 presents teachers' level of technological pedagogical content knowledge competency.

Table 22
Level of Competency of Teachers as to Technological Pedagogical Content Knowledge(n = 6)

Indicators	**Mean**	**Interpretation**
1.Can use technology in teaching the specific content within the defined pedagogical approach in a given context	3.17	Competent
2.Can use technology in such a way that students feel itspositive impact on their learning of the specific subject matter	3.17	Competent
3.Can use technology to organize my teaching and students’learning specific content	3.17	Competent
4.Can use technology to bring real-life experiences, examples, and analogies about specific content	3.17	Competent
5.Can use technology to identify learners' differences in an understanding of the content	3.17	Competent
6.Can use technology to make specific subject matter comprehensible to students from different backgrounds	3.17	Competent
7.Can use technology to provide opportunities to teach students in the classroom to contribute to learningactivities related to specific content	3.17	Competent
Aggregate Mean:	**3.17**	**Competent**

Range:1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators got the highest mean of 3.00 (Competent). The data imply that when used effectively, digital learning technologies in the classroom can boost student engagement, assist teachers in creating better lesson plans, and promote individualized learning. Additionally, it aids in the development of crucial 21st-century abilities in students.

TPACK framework has influenced professionals in the field of education to re-think and re-design preparation programs for teachers nationally and internationally (Chai et al., 2010; Niess, 2005; Shoffner, 2007). TPACK method are used in the education system to restructure courses soteachers will integrate technology and this brought some positive effects on them (Angeli & Valanides, 2009; Chai et al, 2010).

8) Summary Table

Table 23 presents the summary table on the results on teachers' level of competency.

Table 23
Summary Table on the Level of Competency of Teachers(n = 6)

Indicators	Mean	Interpretation
A. Technological Knowledge	2.95	Competent
B. Content Knowledge	3.17	Competent
C. Pedagogical Knowledge	3.19	Competent
D. Pedagogical Content Knowledge	3.14	Competent
E. Technological Pedagogical Knowledge	3.07	Competent
F. Technological Content Knowledge	3.15	Competent
G. Technological Pedagogical Content Knowledge	3.17	Competent
Aggregate Mean:	3.12	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the teachers' competency in pedagogical knowledge got the highest mean of 3.19 (Competent). In contrast, their competency in technological knowledge got the lowest mean of 2.95 (Competent). A teacher must be competent or highly competent when it comesto pedagogical skills since teachers are considered the “learning specialist”. The teachers are the processor and evaluator of new knowledge base. This challenge is situated in a rapidly changing educational system, which is expected to deliver on “21st century skills” in increasingly more diverse classrooms, and conditioned by expanding research-based scientific knowledge base on teaching and learning (Guerriero, 2017). A Highly qualified and competent teachers are the key for excellent education systems. Contrarily, digital technologies—such as computers, mobile devices, and software programs—are versatile (may be used in a variety of ways; Papert, 1980), unstable (change frequently), and opaque (users are not given access to the inner workings of these technologies; Turkle, 1995). Newer technologies are hardto analyze especially for old teachers and this present a new challenge to them because it gives them struggle to use technology in teaching.

H. Challenges Encountered By Teachers In TheAsynchronous And Synchronous Classes

Table 24 presents the challenges of teachers in handling LSENs using the Asynchronous and Synchronous modes.

Table 24
Respondents’ Challenges in the Asynchronous and Synchronous Classes(n = 6)

Indicators	Frequency	Rank
1. Lack of instruction and information	5	1
2. Lack of technical materials and equipment	4	2
3. Poor communication system	4	2
4. Lack of engagement and interaction with LSENs	3	3
5. Lack of skills and knowledge in manipulating technology base materials and equipment	2	4
6. Lack of personal motivation	2	4
7. Lack of network connectivity	1	5
8. Lack of enough resources	1	5

The table shows that the *Lack of instruction and information* ranks 1. This is followed by a *Lack of technical materials and equipment* and a *Poor communication system* at rank 2. While the indicator on *Lack of engagement and interaction with LSENs* ranks 3. The data imply that motivating LSENs to learn requires a very challenging role on the part of the teacher. It requires various teaching styles or techniques to capture students' interests.

Lack of instruction and information was a major problem for teachers in Don Vicente Rama Memorial Elementary - SpEd Center. Distance education is a structured teaching and learning process that takes place outside of the typical learning environment and calls for technology-enabled communication and a unique corporate structure (Moore & Kearsley, 2012). One of the gaps of education during pandemic is the unclear instruction and information. This problem caused the teachers and students to have inconsistent communication.

During the Synchronous and Asynchronous learning, the teachers experienced insufficienttechnical materials and equipment. The administration of the department of education did not provide enough technical materials and equipment for the teachers. There was insufficient supplysince the end of pandemic is blurry and supplies needs to be managed well.

The technical materialsand equipment are vital to provide the curriculum to the students. According to Olarewaju (1984) in Owoh (2009), there is a severe lack of funding for science and technology education, which is especially true right now as the nation struggles to emerge from an extended period of economic hardship.

The pandemic brought lack of engagement and interaction of LSENs and the teachers andthis caused a drastic change in the students learning. Some schools opt to adopt online classes to LSENs but not in the public schools. According to the National Center for Learning Disabilities (NCLD, 2020), many school districts are reluctant to offer distance learning because they feel that federal disability rules impose obstacles that are too difficult to overcome.

I. Test Of Significant Relationship

The study hypothesized that the teachers' level of competencies in integrating the TPACKModel into HyFlex Teaching and Learning have significant relationships with their profiles. Table25 shows the results.

Table 25
Relationship Between the Respondents' Level of Competency in Integrating TPACK Modelinto HyFlex Teaching and Learning and their Profiles
(alpha = 0.05)

Variables	Chi- Square	df	Critical Value	SignificanceResult
Level of Competency and				
Age	2.6252		5.991	Not significantHo accepted
Gender	1.5001		3.841	Not significantHo accepted
Highest Educational Attainment	0.3751		3.841	Not significantHo accepted
No. of Years in Teaching LSENs	0.0001		3.841	Not significantHo accepted
Type of Classroom	0.6001		3.841	Not significantHo accepted
No. of LSENs in class	3.0001		3.841	Not significantHo accepted
Relevant Training/Seminars/Workshops	3.7503		7.815	Not significantHo accepted

The table shows that the teachers' profiles (age, gender, civil status, highest educational attainment, number of years in teaching LSENs, type of classroom, number of LSENs in class, and relevant training, seminars, and workshop attended) do not have significant relationships with each other. The computed Chi-square values are significantly lower than their respective critical values. Thus, the null hypothesis was accepted. That is, their competency level has significant relationships with their profiles.

J. Profile Of The Respondents From Mandaue City Central SpecialEducation School

Tables 26 and 27 present the results of the profile of the respondents.

Table 26
Profile of the Respondents from Mandaue City Central Special Education School(n = 21)

	Frequency	Percentage
A. Age [in years]		
21 - 29	4	19.05
30 - 39	9	42.86
40 - 49	6	28.57
50 - 59	2	9.52
Mean : 37.05		
StDev : 8.88		
B. Gender		
Female	19	90.48
Male	2	9.52
C. Civil Status		
Married	13	61.90
Separated	1	4.76
Single	6	28.57
Widow	1	4.76
D. Highest Educational Attainment		
College Graduate	4	19.05
Masters Level	11	52.38
Masters Graduate	4	19.05
Doctoral Level	2	9.52
E. Number of Years in Teaching LSENs		
1 - 10	14	66.67
11 - 20	7	33.33
Mean : 8.24		
StDev : 6.00		

1) Age

Table 26 shows that about 42.86% of the respondents are aged 30 to 39. At the same time,the age brackets of 50 to 59 got the least number of respondents (2 respondents, 9.52%). Also, thetable shows that the respondents' mean age is 37.05 years old, with a standard deviation of 8.88.

The data imply that there are more teachers at Mandaue City Central Special Education School handling LSENs are below 40 years old. These young teachers handling LSENs require them to adapt their approaches to teaching to meet all students' needs. However, due to school workloads,teachers are not always fully aware of how best to serve special populations.

There may have been challenges to supporting young children with disabilities during theshift to online learning, given a lack of online platforms that are compatible with assistive technology (Hills, 2020) for this to challenges to be address properly Yazcayir and Gurgur (2021)explained that infrastructure and technological savvy teachers are relevant in the success of distance education. The teachers need to be more knowledgeable and skillful on how to properly use the technology for HyFlex teaching and learning to address the need of LSENS.

Due to the pandemic there is no physical interaction between the learners and teachers monitoring and other supplementary materials needs to be accomplished to have a successful distance learning and this additional workload causes a teacher to be burned out in teaching during this pandemic. According to Malik (2019), work overload is one of the factors causing burnout among teachers that causes reduced physical and emotional energy. There are situations when teachers' exhaustion has a negative impact on their teaching.

In this advent of pandemic teachers need to be more focused on how to effectively integratethe technology to pedagogy and content during this pandemic. According to Edelman, (2020) the teachers is needed rapid training in the use of technology and how to provide remote learning to LSENs for them to attain the purpose of special education to ensure that LSENs will be functional and received equal and effective educational service through inclusive education Yazcayir and Gurgur (2021).

2) Gender

The table shows 19 teacher respondents (90.48%) who were females and two teacher respondents (9.52%) who were males. The data imply that there were more female teacher respondents than male respondents.

The gender gap in the teaching profession is projected to widen even further in the years to come, according to data on the age distribution of male and female teachers. Teacher diversity agenda' which emphasizes the importance of teacher diversity in working towards a more just andequitable society – and education system (Heinz and Keane 2018).

In the survey conducted by Philippine Commission on Women (2014) the number of female teachers is increasing in both primary and secondary education, probably the reason that female teachers were the most educated women and were aware of the position of women in society (Tašner et al., 2017) and female teachers were the bearers of important social changes in the field of political and other rights of women and girls, not only in the teaching profession.

3) Civil Status

The table shows that 13 teacher respondents (61.90%) were married, six teacher respondents (28.57%) were single, and one respondent for separated and widowed (4.76%).

The data imply that more teacher respondents are married than single respondents at Mandaue City Central SpecialEducation School handling LSENs.

According to Roussanov and Savor (2013) found the differences in the management stylesof married and single teachers. Married are more into precise and sequential ways on how to dealwith the people in their workplace.

Moreover, In Kisumu County, Kenya teacher's stronger self-efficacy in teaching are most likely demonstrated because they consider their learners as their children that they may able to show there motherly and paternal traits (Aurah & McConnell, 2014; Bagaka's, 2011; Kinyua & Oboko, 2013; Onderi & Croll, 2009)

4) Highest Educational Attainment

Table 26 shows 11 teacher respondents (52.38%) who are Masters Level, while the CollegeGraduate and Masters Graduate have four teacher respondents (19.05%), respectively. The data imply that more teacher respondents at Mandaue City Central Special Education School are enrolled in their master's programs to improve their educational qualifications.

Teachers continue their post graduate study because they want professional growth by expanding their expertise and knowledge on their field of specialization and they development andgrow in there both personal and professional.

It has been noted in various investigations that teachers aim to increase their knowledge in thefield, to conduct academic studies, to specialize, to do their profession better, or to become an academician (Kara, 2008; Nas et al., 2016). Moreover, Alhas, 2006; Albas et al., (2012) enumerates reasons of teachers continuing their graduate studies such as making an academic career, having in-depth knowledge of the field, performing the teaching profession with a higher quality, and having a deeper professional knowledge

In this context, teachers will be well-equipped and qualified in addressing the changes of the community. An example of this change is the shift of education to HyFlex teaching and learning using technology. Being a skilled and knowledgeable teacher that experiences the greatest change in the landscape of education can be an edge to other teachers. Moreover, teacherswho look into their professional development can help to contribute to the professional development of other individuals, support social development, adopt professional ethics and attitudes, and raise individuals who will support studies in the field of education (Koşar et al., 2020).

5) Number of Years in Teaching LSENs

The table shows 14 teacher respondents (66.67%) with 1 to 10 years of experience teaching LSENs. It also shows seven teacher respondents (33.33%) have 11 to 20 years of experience. Also, the table shows that the respondents' mean years in teaching LSENs is 8.24 years, with a standard deviation of 6.00. The data imply that more teacher respondents at MandaueSpEd Central School have teaching experience in LSENs of less than ten years.

Experienced teachers can give a good impact to the learners. With more expertise, teacherscan expect their pupils to do better on indicators of success other than test results, such as beingmore functional in their different developmental domains. However, according to surveyconducted by Learning Policy Institute (2016) about teaching experience increase teacheseffectiveness they found out that the most recent national data suggest that compared to prior decades, a greater proportion of the teaching workforce has less than five years of experience. Novice teachers are less effective, despite the caveat that beginning are disproportionally allocatedto more challenging school (Organizational for Economic Co-operation and development, 2019).Table 27 presents the results of the profile of the respondents from Mandaue City Central
Special Education School.

Table 27
Profile of the Respondents from Mandaue City Central Special Education School(n = 21)

	Frequency	Percentage
F. Type of Classroom		
Inclusive Setting	8	38.10
Self-Contained	13	61.90
G. Disability Type of Students Taught	Frequency	Rank
Intellectual Disability (ID)	12	1
Hearing Impairment (HI)	10	2
Autism Spectrum Disorder (ASD)	8	3
Gifted and Talented	7	4
Orthopedic Disability	6	5
Visual Impairment (VI)	6	5
Emotional and Behavioral Disturbance (EBD)	5	6
Specific Learning Disabilities (SLD)	4	7
H. Number of LSENs in Class		
1 - 10	7	33.33
11 - 20	10	47.62
21 and above	4	19.05
Mean : 16.43		
StDev : 8.76		
I. Hours of Relevant Training/Seminars/ Workshop		
1 - 20	2	9.52
21 - 40	5	23.81
41 - 60	0	0.00
61 and above	14	66.67
Mean : 137.10		
StDev : 78.20		

6) Type of Classroom

The table shows that there were seven teacher respondents (63.64%) who are teaching in aSelf-Contained classroom. Also, it shows four teacher respondents (36.36%) who teach in an Inclusive Setting classroom at Mandaue City Central Special Education School.

The purpose of inclusive education why it is being practiced by teachers, for the learners to be more functional enough academically or even in the different areas of development. To havea successful inclusive set up teacher should work hand in hand in addressing the needs of LSENs. Research has shown that teachers' attitudes towards inclusion are essential for successful inclusive teaching (Carroll, et al., 2003; Sokal and Sharma 2014).

Moreover, through collaboration, experienced teachers can support their colleagues by providing pedagogic guidance and empowerment that may encourage their colleagues to overcomethe challenges of teaching students with special needs and contribute to higher levels of attitudes towards inclusion and self-efficacy (Abegglen and Hessels 2018; Schwab, et al., 2017).

Studies have demonstrated that the success of inclusion programmed depends mostly on teachers' attitudes towards inclusion and professional special education knowledge (Sokal and Sharma 2017).

In addition, relevant training for inclusive education can be a factor also to properly implement inclusive education. Based on the meta-review research conducted by Mieghem et al.,(2018) about inclusive education they concluded that professional development courses and training are vital for the successful implementation of inclusion education because they provide effective pedagogical strategies and focus on changing attitudes and increasing teachers' self- efficacy and motivation to educate LSENs.

7) Disability Type of Students Taught

The table shows that Intellectual Disability ranks 1, Hearing Impairment ranks 2, and Autism Spectrum Disorder ranks 3. In contrast, Specific Learning Disability ranks last (ranks 7).

8) Number of LSENs in Class

Table 27 shows ten teacher respondents (47.62%) handling 11 to 20 LSENs in a class. Atthe same time, seven teacher respondents were handling 1 to 10 LSENs in a class. Also, the tableshows that the respondents' number of LSENs mean is 16.43 with a standard deviation of 8.76. Hours of Relevant Training/Seminars/Workshop

Table 27 shows that 14 teacher respondents (66.67%) have attended 61 or more hours, andfive teacher respondents have attended 21 to 40 hours of relevant training, seminars, and workshops. Also, the table shows that the respondents' mean hours of training, seminars, andworkshops are 137.10 hours, with a standard deviation of 78.20.

K. Level Of Competency Of Teachers From Mandaue City Central Special Education School In Integrating The Tpack Model Into Hyflex Teaching And Learning Of Sped Students

Tables 28 to 35 present the teachers' competency levels from Mandaue City Central Special Education School in integrating the TPACK Model into HyFlex teaching and learning.

1) Technological Knowledge

Table 28 presents the results on teachers' level of technological knowledge competency.

Table 28
Level of Competency of Teachers as toTechnological Knowledge
(n = 21)

Indicators	Mean	Interpretation
1.Can learn technology easily	3.48	Highly Competent
2.Can easily solve some of the technical problems Iencounter	3.14	Competent
3.Know how to seek technology help	3.48	Highly Competent
4.Have sufficient knowledge and experience with the mostrecent technologies	3.24	Highly Competent
5.Can help my friends in their use of different technologies	3.29	Highly Competent
6.Use different technologies regularly for different purposes(i.e., communication, typing, internet)	3.52	Highly Competent
7.Try different technologies in my free time	3.43	Highly Competent
Aggregate Mean:	3.37	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Use different technologies regularly for different purposes (i.e., communication, typing, internet)" got the highest mean of 3.52 (Highly Competent). In contrast, the indicator "Can easily solve some of the technical problems I encounter" got the lowest mean of 3.14 (Competent). The data suggest that virtual classrooms, video, augmented reality, robots, and other technological tools can make the class more engaging and create more inclusive learning environments that encourage collaboration and inquisitiveness and give teachers the ability to gather data on student performance.

Critical and reflective use of technology is favorable in building new knowledge (Instefjord, 2015) The extensive use of technology in the online format as the teachers have to design their course and adapt the contents to an online learning environment, and this process itselfimproves their technological knowledge (Cubeles & Riu, 2018).

According to Jomuad et. al., (2021) teachers need to be more technologically aware in assessing learners, creating and designing educational plan, and other important matter that can really support the education system. A successful integration of technology can make more teaching more convenient and effective.

2) Content Knowledge

Table 29 presents the results on teachers' level of content knowledge competency.

Table 29
Level of Competency of Teachers as toContent Knowledge
(n = 21)

Indicators	Mean	Interpretation
1.Have sufficient knowledge in my field	3.33	Highly Competent
2.Know basic concepts such as definitions in my field	3.24	Competent
3.Understand the structure (organizations) of topics of content I teach	3.29	Highly Competent
4.Can present the same subject matter at different levels	3.33	Highly Competent
5.Can explain background details of concepts and definitions in my field	3.29	Highly Competent
6.Have adequate knowledge in explaining relations among different concepts on the subject matter	3.33	Highly Competent
7.Can make connections between the content I teach and daily life	3.43	Highly Competent
Aggregate Mean:	3.32	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can make connections with content I teach and daily life” got the highest mean of 3.43 (Highly Competent). In contrast, the indicator “Know basic concepts such as definitions in my field” got the lowest mean of 3.24 (Competent). The data implythat it is crucial to remember that technology is a tool, not an end, in education. The promise of educational technology depends in how educators use it and how it is implemented to best meet the needs of LSENs.

This result express that technology give a vital rule in delivering the modified content to the LSENs. Teacher should be knowledgeable on what specific technology to be used to help younger learners understand what it means to think computationally, which is a skill that needs tohoned and practiced (Denning & Tedre, 2019). LSENs will be function and engaging to the subject matter if teacher incorporate the technology in designing the content. According to Rich et al., (2020) they suggested that cognitive tool can help Learners to accrue the subject matter and increase opportunities and interest in using technology for them to show what they really learn. Teacher must take note the accommodations or assistive technology that supports in designing how deliver the content to LSENs.

3) Pedagogical Knowledge

Table 30 presents the results on teachers' level of pedagogical knowledge competency.

Table 30
Level of Competency of Teachers as toPedagogical Knowledge
(n = 21)

Indicators	Mean	Interpretation
1.Can use different approaches to teach	3.24	Competent
2.Can select appropriate teaching styles for students from different backgrounds	3.29	Highly Competent
3.Can use a variety of tools (approaches) to assess students' learning	3.19	Competent
4.Consider students' backgrounds, interests, motivation, and other needs in my teaching	3.43	Highly Competent
5.Can plan individual and group learning activities effectively	3.29	Highly Competent
6.Have knowledge of different pedagogies of teaching and learning	3.14	Competent
7.Have knowledge of different components of teaching (i.e., instruction, assessment)	3.33	Highly Competent
Aggregate Mean:	3.27	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Consider students' backgrounds, interests, motivation,and other needs in my teaching" got the highest mean of 3.43 (Highly Competent). In contrast, the indicator "Have knowledge in different pedagogies of teaching and learning" got the lowest meanof 3.14 (Competent). The data imply that teachers want to improve the performance of LSENs, and technology can help them accomplish this.

To lessen the difficulties, administrators should assist instructors in developing the skills necessary to improve student learning using technology. Also, technology in the classroom should simplify the work of teachers without taking away from their daily schedule.

The design of the educational process is a form of pedagogical activity, which is characterized by the fact that the technological structure of the educational process has a set of methods and tools that guarantee all learning outcomes (Tilavoldiev and Madaliev, 2022).

Teachers should ensure that learners are holistically develop in terms on their different developmental domains.

The rapid transition of remote teaching and learning even more stressful and incredibly challenging practice for many teachers (Hodges, et al., 2020; Marshall et al., 2020; Tate, 2020) with this challenge of the teachers, administrator needs to be more hands on to look into how to help teachers not to be overwhelmed in teaching during this pandemic using technology. Administrator support with induction programs and mentors can help prepare teachers for the challenges they face in the classroom and school (Campbell, 2017; Carre, 2020; Ingersoll, 2018). Administrator support can be interpreted in many ways such as classroom management, providingmentors or individual support for novice teachers, communication with teachers, providing teachers with feedback, and making personal connections with teachers (Burke, 2015; Hughes, 2015; Ingersoll, 2018; Vittek, 2015; Zang, 2016).

4) Pedagogical Content Knowledge

Table 31 presents the results on teachers' level of pedagogical content knowledgecompetency.

Table 31
Level of Competency of Teachers as toPedagogical Content Knowledge
(n = 21)

Indicators	Mean	Interpretation
1.Can select teachable content of the subject matter appropriate to students' level	3.43	Highly Competent
2.Can teach the same subject matter to students at different levels	3.33	Highly Competent
3.Can adjust my teaching according to the level of ease and difficulties with the learning of the specific subject matter	3.24	Competent
4.Can use different methods and approaches to represent specific content	3.24	Competent
5.Can generate alternative teaching approaches according to students' levels	3.24	Competent
6.Have sufficient knowledge in transforming students' misconceptions	3.33	Highly Competent
7.Can use analogies, examples, and demonstrations to support students' learning	3.33	Highly Competent
Aggregate Mean:	3.31	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Can select teachable content of the subject matterappropriate to students' level" got the highest mean of 3.43 (Highly Competent). In contrast, theindicators "Can adjust my teaching according to the level of ease and difficulties with the learning of the specific subject matter," "Can use different methods and approaches to represent specific content," and "Can generate alternative teaching approaches according to students' levels" got thelowest mean of 2.73 (Competent). The data imply that school heads should take stock of wheretheir teachers are regarding their understanding of online spaces for LSENs. They can put into practice answers to issues with educating LSENs by drawing from the lessons learned during this difficult period. Learners' success generally relies on the educator's capability to teach each learner, cooperate individually, and begin building and assembling their own capacities, and knowledge
(Ali et al., 2020). Technology and education are not separately considered, and it is essential to integrate technology into education (Liao, 2007; Arifani et al., 2020). Being a knowledgeable teacher in the modern era of education is a challenging goal that a teacher should achieve because it helps them to be globally competent and enables them to address the needs of the society during this pandemic while also assisting LSENs in adjusting to the new norm of learning.

Stakeholders specifically teachers integrate technology in the educational system and to teaching and learning context as an essential component for the learners to be to be functional and useful member of the society in the future (Farrell and Hamed, 2017). Moreover, according Wright and Akgunduz, (2018) the beneficiaries of modern technology are the stakeholders of education. With this, teachers are required to be more efficient and innovative on how to use the technology for a greater impact to learners' achievement. Teachers should possess a dynamic knowledge and skills on how to design a learning task that is very relevant to each LSENs.

5) Technological Pedagogical Knowledge

Table 32 presents the results on teachers' technological pedagogical knowledge competency level.

Table 32
Level of Competency of Teachers as toTechnological Pedagogical Knowledge(n = 21)

Indicators	Mean	Interpretation
1. Can use technology to assess student's learning	3.43	Highly Competent
2. Can use technology to identify individual differencesamong students	3.38	Highly Competent
3. Can use technology to advance my teaching and students' learning	3.38	Highly Competent
4. Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom	3.29	Highly Competent
5. Can use technology to enrich different components (i.e., lecturing, examples, and assessment) of teaching activity	3.38	Highly Competent
6. Can use technology to engage students with content	3.33	Highly Competent
7. Can use technology to generate alternative approaches to teaching components (i.e., teaching, assessment, presentation, motivation)	3.33	Highly Competent
Aggregate Mean:	3.36	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Can use technology to assess student's learning" got the highest mean of 3.43 (Highly Competent). In contrast, the indicator "Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom" got the lowest mean of 3.29 (Highly Competent). The data imply that technology gives LSENs quick access to knowledge, accelerates learning, and enjoyable opportunities to put what they learn into practice. It allows them to delve deeper into difficult concepts and explore new topics.

According to (Iglesias-Prades et al., 2021; Oliveira et al., 2021) Incorporating technologyin teaching and learning context provided a chance for teachers to undergo digital transformationand find new ways for teaching and learning. With this transition happened with the teachers, with give an impact to student achievement. Through this technology integration, learners can get different opportunity to learn in different aspect and have also transition as being holistic individual. Technology in the classroom today offers many opportunities to create circumstances for comprehending the nature of new knowledge and better assimilating the means of information exchange (Yusupova, 2021). In addition, technology approaches enable students to demonstrate their own skills by selecting the level of engagement, the volume of information, the rate of professional development,and engaging in discourse with all other educational players. (Yusupova, 2021).

6) Technological Content Knowledge

Table 33 presents teachers' level of technological content knowledge competency.

Table 33
Level of Competency of Teachers as toTechnological Content Knowledge
(n = 21)

Indicators	Mean	Interpretation
1.Can use technology to present the content in differentways	3.38	Highly Competent
2.Can use technology to enrich the content	3.43	Highly Competent
3.Can use technology to demonstrate unobservable facts, concepts, and principles of the content	3.29	Highly Competent
4.Can use technology to access additional resources about content that may otherwise not be available	3.33	Highly Competent
5.Can use technology to provide students with opportunitiesto explore content by themselves on their individual pave	3.29	Highly Competent
6.Can use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters	3.29	Highly Competent
7.Can use technology in teaching to provide different formsof content	3.33	Highly Competent
Aggregate Mean:	3.33	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can use technology to enrich the content” got the highest mean of 3.43 (Highly Competent). In contrast, the indicators “Can use technology to demonstrate unobservable facts, concepts, and principles of the content,” "Can use technology to provide students with opportunities to explore content by themselves at their individual pave," and"Can use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters" got the lowest mean of 2.73 (Competent). The data implythat through technology inside and outside the classroom, the LSENs can gain 21st-century technical skills necessary to improve their living conditions.

One advantage of pandemic is it concretely change the ways of educating learners. It engages the learners to a very relevant tool which is technology that can help them to be more develop holistically as individual. In this 21st century skill being technologically skilled individualcan be a good factor to be consider as globally competent. In the study of Baharuddin et al. (2016),in their research, emphasized students’ understanding of digital literacy, which might lighten the load on knowledge-seeking strategies and new technology-based learning techniques while Abdullateef (2021) stated that digital learning tools could foster 21st-century skills.

In addition, The Queensland Curriculum and Assessment Authority (2015) emphasize that 21st-century skills as “high priority abilities and qualities thought to be the most important in assisting students and learners in living and working successfully in the twenty-first century.” With this creative and innovative ability of the learners will the solution to complicated issues or tasks via synthesis and analysis and then merge or present what they have learned in new and innovativeways.

7) Technological Pedagogical Content Knowledge

Table 34 presents teachers' level of technological pedagogical content knowledge competency.

Table 34
Level of Competency of Teachers as to Technological Pedagogical Content Knowledge(n = 21)

Indicators	Mean	Interpretation
1.Can use technology in teaching the specific content within the defined pedagogical approach in a given context	3.29	Highly Competent
2.Can use technology in such a way that students feel its positive impact on their learning of the specific subject matter	3.43	Highly Competent
3.Can use technology to organize my teaching and students' learning specific content	3.43	Highly Competent
4.Can use technology to bring real-life experiences, examples, and analogies about specific content	3.43	Highly Competent
5.Can use technology to identify learners' differences in an understanding of the content	3.29	Highly Competent
6.Can use technology to make specific subject matter comprehensible to students from different backgrounds	3.29	Highly Competent
7.Can use technology to provide opportunities to teachstudents in the classroom to contribute to learning activities related to specific content	3.33	Highly Competent
Aggregate Mean:	3.36	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Can use technology in such a way that students feel its positive impact in their learning of the specific subject matter," "Can use technology to organize my teaching and students' learning specific content," and "Can use technology to bring real-life experiences, examples, and analogies about specific content" got the highest mean of 3.43 (Highly Competent). In contrast, the indicators "Can use technology in teaching the specific content withinthe defined pedagogical approach in a given context," "Can use technology to identify learners' differences in understanding of the content," and "Can use technology to make specific subject matter comprehensible by students from different backgrounds" got the lowest mean of 3.29 (Highly Competent). The data imply that the LSENs can learn more effectively with the directionof their teachers in the use of technology. While technology can help LSENs learn and acquire knowledge through technology, learning is more effective through guidance from their teachers.

In the modern ways of teaching and learning context we consider teachers as facilitator oflearning in a way that they guide learners to achieve more in academic or in different aspect. In this HyFlex teaching and learning a Teacher with a high knowledge in integrating technological concept into teaching and learning process can give a wide range of opportunity for the learners toachieve more (Scherer et al., 2021). With this kind of attribute teachers is very need by the learners. Facilitating learning to LSENs digital technologies are a very useful means for fostering this communication and connection between the teachers and learners needs (Cattaneo et al., 2022).

However, digital competence of teachers is more complex to define; it is a broader conceptthat includes not only the technical skills of using technological devices and digital resources in an educational context, but it also considers the pedagogical dimension, attitude, strategies, and awareness that enables teachers using technology to achieve teaching and learning goals effectively (Cattaneo et al., 2022; H am al inen et al., 2021; Reiso glu & Çebi, 2020).

8) Summary Table

Table 35
Summary Table on the Level of Competency of Teachers(n = 11)

Indicators	Mean	Interpretation
A. Technological Knowledge	3.37	Highly Competent
B. Content Knowledge	3.32	Highly Competent
C. Pedagogical Knowledge	3.27	Highly Competent
D. Pedagogical Content Knowledge	3.31	Highly Competent
E. Technological Pedagogical Knowledge	3.36	Highly Competent
F. Technological Content Knowledge	3.33	Highly Competent
G. Technological Pedagogical Content Knowledge	3.36	Highly Competent
Aggregate Mean :	3.33	Highly Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

Table 35 presents the summary table on the results on teachers' level of competency. The table shows that the teachers' competency in technological knowledge got the highest mean of 3.37(Highly Competent). In contrast, their competency in pedagogical knowledge got the lowest meanof 3.27 (Highly Competent).

L. Challenges Encountered By Teachers In TheAsynchronous And Synchronous Classes

Table 36 presents the challenges of teachers in handling LSENs using the Asynchronous and Synchronous modes.

Table 36
Respondents' Challenges in the Asynchronous and Synchronous Classes(n = 11)

Indicators	Frequency	Rank
1. Lack of network connectivity	16	1
2. Heavy workload due to home and school activity	13	2
3. Student lack of interest	10	3
4. Mental stress due to pandemic	10	3
5. Lack of technical materials and equipment	8	4
6. Bulky course content for a modular setup	7	5
7. Lack of personal motivation	6	6
8. Lack of skills and knowledge in manipulating technologybase materials and equipment	5	7
9. Lack of enough resources	5	7
10. Lack of engagement and interaction with LSENs	4	8
11. Delay in the timing of the lecture	3	9
12. Poor classroom management	1	10
13. Poor time management	1	10

The table shows that the *Lack of network connectivity* ranks 1. A *Heavy workload followsthis from home, and school activity* ranks 2. Also, the indicator *of Student lack of interest* and *Mental stress due to the pandemic* ranks 3. While the indicator on *Lack of engagement and interaction with LSENs* ranks 3.

In contrast, the indicators “Poor classroom management" and "Poor time management” ranks last at rank 10.

Lack of network connectivity is the primary problem in Mandaue City Central Special Education School. This problem is the most relevant challenges encountered by some in differentinstitution. According to Di Pietro et al. (2020), teachers struggle to figure out how to specifically address the needs of LSENs since these students lack strong connectivity to support their interaction or class. Learners who are located in rural areas and come from disadvantaged families also lack access to technology, the internet, and educational resources. Also, it is challenging to keep track of how students are completing their coursework online and to verify that they are not plagiarizing on their exams (Basilaia & Kvavadze, 2020). Students without access to the internet will also find it challenging to complete tests and assessments (Sahu, 2020).

Due to the new context that teacher is assessing and making reports afar from their learnersand to ensure that learners attained the expected outcome. This set up adds on to the challenges of Mandaue City Central Special Education School to have an extra workload aside from teaching.According to Lambert et al., (2019) teachers’ additional workload bring so much burden in teachingin this time of pandemic with this it can cause a higher risk of occupational stress for teachers (Lambert et al., 2019). Moreover, Esteras et al., 2016; Granados et al., 2019; Seijas-Solano (2019), stated on their research that stress and burnout syndrome in the teacher population. Similarly, studies conducted with Latin American teachers reported that they presented high levels of stress,anguish and anxiety during the suspension of face-to-face classes due to the global COVID-19 pandemic (Hernández, 2020; Urcos et al., 2020).

In addition, In the study of Rubilar and Oros (2021) they found that most educators pointedto the lack of technological equipment, internet connectivity, excessive workload and students’ demotivation as internal and external obstacles that made distance educational work difficult. Withthis challenge this may cause a greater impact on how they manage their learners as well as their responsibility in the school. In the clear picture it can affect the classroom presences to make thelearner not be more interested to engage to their learning task in the class.

M. Test Of Significant Relationship

The study hypothesized that the teachers' level of competencies in integrating the TPACKModel into HyFlex Teaching and Learning have significant relationships with their profiles. Table37 shows the results.

Table 37
Relationship Between the Respondents’ Level of Competency in Integrating TPACK Modelinto HyFlex Teaching and Learning and their Profiles
(alpha = 0.05)

Variables	Chi- Square	df	Critical Value	Significance	Result
Level of Competency and					
Age	4.7413		7.815	Not significant	Ho accepted
Gender	2.4321		3.841	Not significant	Ho accepted
Civil Status	3.3193		7.815	Not significant	Ho accepted
Highest Educational Attainment	8.4263		7.815	Significant	Ho rejected
No. of Years in Teaching LSENs	1.5271		3.841	Not significant	Ho accepted
Type of Classroom	0.0291		3.841	Not significant	Ho accepted
No. of LSENs in class	1.6422		5.991	Not significant	Ho accepted
Relevant Training/Seminars/Workshops	6.1092		5.991	Significant	Ho rejected

The table shows that the highest educational attainment of teachers has a significant relationship with the level of competency in integrating the TPACK Model into HyFlex Teachingand Learning. The computed Chi-square value of 8.426 is significantly higher than its critical valueof 7.815 at a df of 3. Thus, the null hypothesis was rejected. In this manner, their competency levelsignificantly correlates with their highest educational attainment.

Also, the table shows that teachers' relevant training, seminars, and workshops have a significant relationship with the level of competency in integrating the TPACK Model into HyFlex Teaching and Learning. The computed Chi-square value of 6.109 is significantly higher than its critical value of 5.991 at a df of 2.

Thus, the null hypothesis was rejected. With this, their level of competency has a significant relationship with the relevant training, seminars, and workshops ofteachers at Mandaue City Central Special Education School.

N. Overall Profile Of The Respondents

Tables 38 and 39 present the results of the profile of the respondents.

Table 38
Overall Profile of the Respondents from the Three Identified School(n = 38)

	Frequency	Percentage
A. Age [in years]		
21 - 29	5	13.16
30 - 39	14	36.84
40 - 49	12	31.58
50 - 59	7	18.42
Mean : 40.13 StDev : 9.10		
B. Gender		
Female	30	78.95
Male	8	21.05
C. Civil Status		
Married	27	71.05
Separated	1	2.63
Single	9	23.68
Widow	1	2.63
D. Highest Educational Attainment		
College Graduate	5	13.16
Masters Level	24	63.16
Masters Graduate	5	13.16
Doctoral Level	4	10.53
E. Number of Years in Teaching LSENs		
1 - 10	21	55.26
11 - 20	15	39.47
21 - 30	2	5.26
Mean : 10.53 StDev : 6.97		

1) Age

Table 38 shows that about 36.84% of the respondents are aged 30 to 39. At the same time,the age brackets of 40 to 49 got the 12 teacher respondents (31.58%). While the age brackets of 21 to 29 got a minor frequency of 5 (13.16%). Also, the table shows that the respondents' mean age is 40.13 years old, with a standard deviation of 9.10. The data imply that more teachers in their middle ages are eager to handle LSENs in the three identified public schools.

2) Gender

The table shows 30 teacher respondents (78.95%) who were females and eight teacher respondents (36.36%) who were males. The data imply that there were more female teacher respondents than male respondents.

3) Civil Status

The table shows that 27 teacher respondents (71.05%) were married, nine teacher respondents (23.68%) were single, and one respondent (2.63%) was separated or widowed. The data imply that more teacher respondents are married than single respondents.

4) Highest Educational Attainment

Table 38 shows 24 teacher respondents (63.16%) who are Masters Level, while the CollegeGraduate and Masters Graduate have five teacher respondents (13.16%), respectively. The data imply that more teacher respondents enrolled in master's programs to improve their educational qualifications.

5) Number of Years in Teaching LSENs

The table shows 21 teacher respondents (55.26%) with 1 to 10 years of experience teaching LSENs. It also shows that 15 teacher respondents (39.47%) have 11 to 20 years of experience andtwo teacher respondents (5.26%) have 21 to 30 years of experience in teaching LSENs. Also, the table shows that the respondents' mean years in teaching LSENs is 10.53 years, with a standard deviation of 6.97. The data imply that more teacher respondents have teaching experience in LSENs of 1 to 10 years.

Table 39
Profile of the Respondents from the Three Identified School(n = 38)

	Frequency	Percentage
F. Type of Classroom		
Inclusive Setting	13	34.21
Self-Contained	25	65.79
G. Disability Type of Students Taught	Frequency	Rank
Intellectual Disability (ID)	19	1
Hearing Impairment (HI)	16	2
Autism Spectrum Disorder (ASD)	12	3
Orthopedic Disability (OD)	9	4
Visual Impairment (VI)	8	5
Gifted and Talented (GT)	7	6
Emotional and Behavioral Disturbance (EBD)	6	7
Other Health Impairments	1	8
H. Number of LSENs in Class		
1 - 10	18	47.37
11 - 20	14	36.84
21 and above	6	15.79
Mean : 13.76		
StDev : 8.16		
I. Hours of Relevant Training/Seminars/ Workshop		
1 - 20	5	13.16
21 - 40	11	28.95
41 - 60	5	13.16
61 and above	17	44.74
Mean : 98.50		
StDev : 75.70		

Table 39 presents the results of the profile of the respondents from the three identified SpEd schools.

6) Type of Classroom

The table shows that 25 teacher respondents (65.79%) are teaching in a Self-Contained classroom. Also, it shows 13 teacher respondents (34.21%) who teach in an Inclusive Setting classroom. The data imply that a self-contained classroom is one in which a teacher teaches the same group of student's multiple subjects throughout the day. A Multiple Subject teaching credential authorizes self-contained classrooms.

7) Disability Type of Students Taught

The table shows that Intellectual Disability ranks 1, Hearing Impairment ranks 2, and Autism Spectrum Disorder ranks 3. Also, it shows that Other Health Impairments ranks last (ranks 8). The data imply that the term "intellectual disability" refers to various limits in cognitive functioning and capabilities, including communication, social, and self-care abilities. Due to these restrictions, a child may grow and learn more slowly or otherwise differently than a youngster who is otherwise healthy and developing normally. Before a child becomes 18, intellectual disability can occur at any time, even before birth. According to the date gathered from National Center for Educational Statistics (2022) the category of disabilities with the largest reported percentage of students are specific learning disabilities, autism, developmental delays, emotional and behavioral disturbances, and intellectual disabilities. With this, ID is one of the largest reported exceptionalities in the world. In Addition, it was reported also that learners with traumatic brain injuries, various disabilities, hearing difficulties, orthopedic impairments, vision impairments, and other health conditions, and deaf-blindness are reported for increasing their population in some special education institutions and base also the assessment and evaluation conducted for those learners that is suspected with exceptional needs (National Center for Educational Statistics, 2022). The cause of this increase of reported cases is not yet determined but some researchers is expanding their scope to exactly determine the increase of population. With is statistical survey done by National Center for Educational Statistics it means that Mandaue City Central Special Education School is experiencing this kind of increase of population on the learners with Intellectual Disabilities, Autism Spectrum Disorder, and other health related condition as well as Hearing Impairment.

8) Number of LSENs in Class

Table 39 shows 18 teacher respondents (47.37%) handling 1 to 10 LSENs in a class. At the same time, 14 teacher respondents handled 11 to 20 LSENs in a class. Also, the table shows that the respondents' number of LSENs mean is 13.76 with a standard deviation of 8.16.

9) Hours of Relevant Training/Seminars/Workshop

Table 39 shows that 17 teacher respondents (44.74%) have attended 61 or more hours, and 11 teacher respondents have attended 21 to 40 hours of relevant training, seminars, and workshops. This is followed by 1 to 20 hours and 41 to 60 hours (5 respondents, 13.16%). Also, the table shows that the respondents' mean hours of training, seminars, and workshops are 98.50 hours, with a standard deviation of 75.70.

O. Level Of Competency Of Teachers From The Three Identified Schools In Integrating The Tpack Model Into Hyflex Teaching And Learning Of Sped Students

Tables 40 to 41 present the results of teachers' competency levels from Bantayan Central Elementary School-SpEd Center in integrating the TPACK Model into HyFlex teaching and learning.

1) Technological Knowledge

Table 40 presents the results on teachers' level of technological knowledge competency.

Table 40
Level of Competency of Teachers as to Technological Knowledge
(n = 38)

Indicators	Mean	Interpretation
1. Can learn technology easily	3.32	Highly competent
2. Can easily solve some of the technical problems I encounter	3.03	Competent
3. Know how to seek technology help	3.24	Competent
4. Have sufficient knowledge and experience with the most recent technologies	3.00	Competent
5. Can help my friends in their use of different technologies	3.08	Competent
6. Use different technologies regularly for different purposes (i.e., communication, typing, internet)	3.29	Highly competent
7. Try different technologies in my free time	3.16	Competent
Aggregate Mean :	3.16	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can learn technology easily” got the highest mean of 3.32 (Highly Competent). In contrast, the indicator “Have sufficient knowledge and experience with the most recent technologies” got the lowest mean of 3.00 (Competent). The data imply that technology helps teachers handle students with disabilities to reach their potential. Response to technology provides tools required for the assessment of LSENs’ knowledge Such a technique makes it easier to keep track of learning progress and see it as a series of charts. Thanks to technology, teachers can now see students' progress more clearly. It enables monitoring a student's educational programme and, if necessary, making adjustments. Better management of personalized education plans by teachers enables LSENs to achieve better outcomes.

The results show the dynamic interaction elements both internal and external that affect how instructors use technology, which is consistent with prior studies (Ertmer 1999; Ertmer 2001; Sadaf et al., 2016). Teachers that participated in the study regularly use technology and are proficient with a variety of software and apps. Moreover, technology is required in the curriculumand pedagogy and teachers are expected to believe in it and be willing to use it in their daily practice (Ertmer 2005; Tondeur et al. 2017).

A fluidity of technologies has also allowed information and communications technology (ICT) to promote a new teaching approach entitled networked learning (Munday, 2018; Petersen & Sachs, 2015). To completely attain the goal of Hyflex Learning in using technology Technological Knowledge of the SpEd teacher is an essential consideration because it helps the teachers to properly accommodate the needs of the LSENs. Kwok-Wing and Smith (2017) suggest incorporating mobile and digital technologies in the formal courses in conjunction with more traditional methods of learning in order to cater for the diverse learning style of students.

2) Content Knowledge

Table 41 presents the results on teachers' level of content knowledge competency.

Table 41
Level of Competency of Teachers as toContent Knowledge
(n = 38)

Indicators	Mean	Interpretation
1.Have sufficient knowledge in my field	3.32	Highly competent
2.Know basic concepts such as definitions in my field	3.29	Highly competent
3.Understand the structure (organizations) of topics of content I teach	3.26	Highly competent
4.Can present the same subject matter at different levels	3.32	Highly competent
5.Can explain background details of concepts and definitions in my field	3.26	Highly competent
6.Have adequate knowledge in explaining relations among different concepts on the subject matter	3.29	Highly competent
7.Can make connections between the content I teach and daily life	3.32	Highly competent
Aggregate Mean :	3.29	Highly competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Have sufficient knowledge in my field,” “Can present the same subject matter at different levels,” and “Can make connections with content I teach and daily life” got the highest mean of 3.32 (Highly Competent). In contrast, the indicators “Understand the structure (organizations) of topics of content I teach” and “Can explain background details of concepts and definitions in my field” got the lowest mean of 3.26 (Highly Competent).

The data imply that it has always been essential for educators in the classroom to be familiar with special education law, especially when managing LSENs.

Teachers who are experts in incorporating different knowledge can create an effective atmosphere for learners with LSENs. For a SpEd teacher who is very well knowledgeable about the context of the content they can create a learning activity that can motivate LSENs to achieve more on the task. Teachers will be able to capture an understanding of the lesson to all LSENs in the class and hence provide equal opportunity in learning.

Researchers have identified that teachers' knowledge of content, knowledge of learners and knowledge of curriculum are involved during lesson plan preparation (Sawyer, 2018) and other considerations that make the learning experience more relevant to the need of LSENs. It enables teachers to deeply consider the learners and their ways of learning. A high competency interms of teacher's content knowledge can help teachers be effective in the selection of various appropriate teaching material and resources (Shohani et al., 2015) together with activities that canfit with a topic to be taught and the learners learning style.

The quality of a teacher's experience in the initial years of teaching is critical to developingand applying the knowledge and skills acquired during initial teacher training and to forming positive attitudes to teaching as a career (Bezzina et al. 2004, Kessels 2010). This teacher's experience is a big factor that impacts the teacher's content knowledge. Repetitive demonstrationand creating learning that is connected to the content or lesson teachers may tent to familiarize thecontent and make dynamic presentations on it.

3) Pedagogical Knowledge

Table 42 presents the results on teachers' level of pedagogical knowledge competency.

Table 42
Level of Competency of Teachers as toPedagogical Knowledge
(n = 38)

Indicators	Mean	Interpretation
1.Can use different approaches to teach	3.26	Highly competent
2.Can select appropriate teaching styles for students from different backgrounds	3.29	Highly competent
3.Can use a variety of tools (approaches) to assess students' learning	3.24	Competent
4.Consider students' backgrounds, interests, motivation, and other needs in my teaching	3.47	Highly competent
5.Can plan individual and group learning activities effectively	3.29	Highly competent
6.Have knowledge of different pedagogies of teaching and learning	3.18	Competent
7.Have knowledge of different components of teaching (i.e., instruction, assessment)	3.32	Highly competent
Aggregate Mean:	3.29	Highly competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Consider students' backgrounds, interests, motivation,and other needs in my teaching" got the highest mean of 3.47(Highly Competent). In contrast, the indicator "Have knowledge in different pedagogies of teaching and learning" got the lowest mean of 3.18 (Competent). The data imply that cultivating interest should not be an afterthought in the typical learning situation. Interest is essential to academic success.

Interventions to develop students' interest matter in any educational context but maybe most needed in academic domains that many students do not find initially interesting or those domains in which interest typically declines over time.

The data presented that the participative teachers' respondents are highly competent in regards with their Pedagogical Knowledge (PK). Teachers are able to create friendly learning environments and effective teaching for all the diverse learners. Majority of the teacher are highly competent which they can able to use different approaches to teach, can select appropriate teaching styles for students from different backgrounds, can use a variety of tools to assess the students' learning, can consider students' backgrounds and interest, motivation and other needs in teaching, can able to plan individual and group learning activities effectively, have knowledge in different pedagogies of teaching and learning and have knowledge in different components of teaching such as instruction or assessment.

Friendly learning environments and effective teaching strategies can improve students' outcomes. There is lots of empirical research that has shown that the teachers have the biggest impact on the success and achievements of the learners. Pedagogical knowledge is very important;content knowledge alone is insufficient.

For example, when teachers' content knowledge is controlled (via direct assessment), higher levels of knowledge do not predict better student scores (Baumert et al. 2010). According to Wayne and Youngs (2003), the result should not be confused with those from effectiveness studies learning gains. As more and more researchers are beginning to conduct the empirical studies of teacher professionalism, the concept of general pedagogical knowledge as part of professional competence is becoming more relevant (Blomeke, et al., 2008; Kunter et al.,2013; Voss, 2011). On how the teachers provide the environment and effective teaching strategies or pedagogical knowledge towards the learners would to see their fullest potential.

4) Pedagogical Content Knowledge

Table 43 presents the results on teachers' level of pedagogical content knowledge competency.

Table 43
Level of Competency of Teachers as toPedagogical Content Knowledge
(n = 38)

Indicators	Mean	Interpretation
1.Can select teachable content of the subject matter appropriate to students' level	3.37	Highly competent
2.Can teach the same subject matter to students at different levels	3.29	Highly competent
3.Can adjust my teaching according to the level of ease and difficulties with the learning of the specific subject matter	3.29	Highly competent
4.Can use different methods and approaches to represent specific content	3.21	Competent
5.Can generate alternative teaching approaches according to students' levels	3.26	Highly competent
6.Have sufficient knowledge in transforming students' misconceptions	3.26	Highly competent
7.Can use analogies, examples, and demonstrations to support students' learning	3.29	Highly competent
Aggregate Mean:	3.28	Highly competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Can select teachable content of the subject matter appropriate to students' level" got the highest mean of 3.37 (Highly Competent). In contrast, the indicator "Can use different methods and approaches to represent specific content" got the lowest mean of 3.21 (Competent). The data imply that a teacher's teaching style can impact student learning and motivation, which contains an exercise to help you reflect on teaching styles and their impacts.

The data presented implied that the teachers' respondents are competent in pedagogical content knowledge. It is on how the knowledge is being organized and used but It is not necessarily about the quality or quantity of teachers' subject matter knowledge.

Based on the result the teachers shows competence in selecting teachable content of the subject matter appropriate to student's level, teaching the same subject matter to students at different levels, adjusting the teaching according to level of ease and difficulties with learning of specific subject matter, using different methods and approaches to represent specific content, generating alternative teaching approaches to represent specific content, having a sufficient knowledge in transforming students' misconceptions and using analogies, examples and demonstrations to support student's learning.

The teacher is capable to view things beyond with their scope. The mastery of the teachers in the specific subject will not make the learners gain the full access of knowledge. Somehow, if the teachers have the power to organize and used the subject for the development of the learners it gives the big impact. A type of information called pedagogical content knowledge transforms science majors become science teachers rather than scientists (Gudmundsdottir, 1987). In spite of the fact that scientists are the subject-matter experts, teachers differ from them in how their knowledge is arranged and used. Because it requires teachers' abilities to present the conceptual approach, relational understanding, and adaptive reasoning of the subject matter, pedagogical content knowledge plays a crucial part in the process of teaching and learning (Kathirveloo et al., 2014) .

5) Technological Pedagogical Knowledge

Table 44 presents the results on teachers' technological pedagogical knowledge competency level.

Table 44
Level of Competency of Teachers as toTechnological Pedagogical Knowledge(n = 38)

Indicators	Mean	Interpretation
1.Can use technology to assess student's learning	3.24	Competent
2.Can use technology to identify individual differences among students	3.21	Competent
3.Can use technology to advance my teaching and students' learning	3.21	Competent
4.Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom	3.16	Competent
5.Can use technology to enrich different components (i.e., lecturing, examples, and assessment) of teaching activity	3.21	Competent
6.Can use technology to engage students with content	3.16	Competent
7.Can use technology to generate alternative approaches to teaching components (i.e., teaching, assessment, presentation, motivation)	3.18	Competent
Aggregate Mean:	3.20	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator "Can use technology to assess student's learning" got the highest mean of 3.24 (Competent). In contrast, the indicators "Can use technology to bring students' differences (learning preferences, content background, academic level) into the classroom" and "Can use technology to engage students with content" got the lowest mean of 3.16(Competent). The data imply that technology can be used for instant assessment in many ways, such as tracking the progress of LSENs over time. Perhaps even more compelling, however, EdTech can also be used to aid formative assessment: helping to boost engagement, identify knowledge gaps, and support further/deeper learning. The data implied that teachers are competent when it comes to their Technological Pedagogical Knowledge (TPK). They use technology to assess student's learning, identify individual differences among students, advance teaching and students' learning, bring students' individual differences into the classroom, enrich different components of teaching activity, engagestudents with content, and generate alternative approaches to teaching components.

Several studies have shown that teachers support their pedagogical strategies by integrating ICT into their teaching, for example, to increase student interaction, to help explain complex concepts, to maintain students' attention, to adapt their teaching to individual student needs and tomake their teaching process more efficient (Jang & Tsai, 2012).

Integrating technology into a curriculum will be more effective if it is included as a component in the delivery of instruction and not as a separate entity. Integrating technology involves managing and coordinating available instructional aids and resources to facilitate learning. To be competent, a teacher should be able to adapt to the use of technology in delivering specific learning activities. Bosch & Cardinale (1993) maintain that while it is important for teachers to be provided with technological skill, it is also important to educate them on how to usethat skill to support learning.

6) Technological Content Knowledge

Table 45 presents teachers' level of technological content knowledge competency.

Table 45
Level of Competency of Teachers as toTechnological Content Knowledge
(n = 38)

Indicators	Mean	Interpretation
1.Can use technology to present the content in different ways	3.24	Competent
2.Can use technology to enrich the content	3.26	Highly competent
3.Can use technology to demonstrate unobservable facts, concepts, and principles of the content	3.16	Competent
4.Can use technology to access additional resources about content that may otherwise not be available	3.24	Competent
5.Can use technology to provide students with opportunities to explore content by themselves on their individual pave	3.13	Competent
6.Can use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters	3.16	Competent
7.Can use technology in teaching to provide different forms of content	3.13	Competent
Aggregate Mean:	3.19	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicator “Can use technology to enrich the content” got the highest mean of 3.26 (Highly Competent). In contrast, the indicators “Can use technology to provide students with opportunities in exploring content by themselves at their pace” and “Can usetechnology in teaching to provide different forms of content” got the lowest mean of 3.13 (Competent). The data imply that today's schools use technology just as frequently as we do in every other area of our lives.

The results revealed that the teachers are competent to the Technological Content Knowledge. They demonstrated a functional proficient level in the use technology to present the content in different ways, enrich the content, demonstrate unobservable facts, concepts, and principles of the content, access additional resources about content that may otherwise not be available, provide students with opportunities in exploring content by themselves at their own individual pave, support students in deeper inquiry about the content, concepts, and relationships with other subject matters, and teaching to provide different forms of content.

The new era, in which information and communication technology is viewed as the way to modernize education and its implementation with the students, requires the change of initial teachers’ education and therefore the change of their professional development which must beprimarily based on competencies required in modern education as well as the discourse in whichthe teacher realizes his/her role as an educational practice researcher (Maksimovic & Dimic, 2016).Teachers use technology in the classroom to enhance the students learning experience.

Using different types of technology in the classroom created learners who are actively engaged with learning objective and it also create pathways for differentiated instruction, which is a plus factor in teaching LSENs, to meet their unique needs.

7) Technological Pedagogical Content Knowledge

Table 46 presents teachers' level of technological pedagogical content knowledge competency.

Table 46
Level of Competency of Teachers as to Technological Pedagogical Content Knowledge(n = 38)

Indicators	Mean	Interpretation
1.Can use technology in teaching the specific content within the defined pedagogical approach in a given context	3.16	Competent
2.Can use technology in such a way that students feel its positive impact on their learning of the specific subject matter	3.21	Competent
3.Can use technology to organize my teaching and students' learning specific content	3.24	Competent
4.Can use technology to bring real-life experiences, examples, and analogies about specific content	3.24	Competent
5.Can use technology to identify learners' differences in an understanding of the content	3.13	Competent
6.Can use technology to make specific subject matter comprehensible to students from different backgrounds	3.13	Competent
7.Can use technology to provide opportunities to teach students in the classroom to contribute to learningactivities related to specific content	3.18	Competent
Aggregate Mean:	3.18	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the indicators "Can use technology to organize my teaching and students' learning specific content" and "Can use technology to bring real-life experiences, examples, and analogies about specific content" got the highest mean of 3.24 (Competent). In contrast, the indicators "Can use technology to identify learners' differences in understanding of the content" and "Can use technology to make specific subject matter comprehensible by studentsfrom different backgrounds" got the lowest mean of 3.13 (Competent). The data imply that whether it be a requirement for a class, a deadline-driven project for a job, or annual tax forms, technology has always been made to make the user's responsibilities easier to perform. There is a larger need for technology support in the classroom for pupils who have learning and developmental challenges.

Teachers are competent and functional to use technology in teaching the specific content within the defined pedagogical approach in a given context, a way that students feel its positive impact in their learning of specific subject matter, organize my teaching and students' learning specific content, bring real-life experiences, examples, and analogies about specific content, identify learners' individual differences on understanding of the content, make specific subject matter comprehensible by students from different backgrounds, and provide opportunities to eachstudents in the classroom to contribute to learning activity related to specific content. Teacher educators need to explicitly teach how the unique features of a tool can be used totransform a specific content domain for specific learners and teachers need to be taught about theinteractions among technology, content, pedagogy, and learners (Angeli & Valanides, 2009). A teacher tends to do things the way they learn. Teachers are now making changes and incorporating technology, pedagogy, and content in their methodology of teaching. The paradigm shifts of education made the teachers to be competent in delivering the curriculum to the LSENs. Since learning digital technology to use in teaching is a recent innovation, the teacher has now dual responsibility of updating themselves on the current trends and at the same time applying it in the teaching and learning process. The result above shows that we have competent SpEd Teachers and Receiving Teachers who works productively to integrate educational technology into the classroom. The difficulties educators face in addressing the needs of multicultural students—defined as students from culturally and linguistically diverse backgrounds, including those who have or are at risk of having disabilities and students from socioeconomically disadvantaged backgrounds—are of the utmost importance, according to Banks (2002).The result shows the we have teachers who are content-driven, pedagogically-sound, and has technologically-forward thinking knowledge who are able to deliver the different instructional practices to our LSENs.

8) Summary Table

Table 47 presents the summary table on the results on teachers' level of competency.

Summary Table on the Level of Competency of Teachers(n = 38)

Indicators	Mean	Interpretation
A. Technological Knowledge	3.16	Competent
B. Content Knowledge	3.29	Highly competent
C. Pedagogical Knowledge	3.29	Highly competent
D. Pedagogical Content Knowledge	3.28	Highly competent
E. Technological Pedagogical Knowledge	3.20	Competent
F. Technological Content Knowledge	3.19	Competent
G. Technological Pedagogical Content Knowledge	3.18	Competent
Aggregate Mean:	3.23	Competent

Range: 1.00-1.74 Not competent; 1.75-2.49 Less competent; 2.50-3.24 Competent; 3.25-4.00 Highly competent

The table shows that the teachers' competencies in content knowledge and pedagogical knowledge got the highest mean of 3.29 (Highly Competent). In contrast, their competency in technological knowledge got the lowest mean of 3.16 (Competent).

P. Challenges Encountered By Teachers In TheAsynchronous And Synchronous Classes

Table 48 presents the challenges of teachers in handling LSENs using the Asynchronous and Synchronous modes.

Table 48

Respondents' Challenges in the Asynchronous and Synchronous Classes(n = 38)

Indicators	Frequency	Rank
1. Lack of network connectivity	26	1
2. Heavy workload due to home and school activity	22	2
3. Lack of technical materials and equipment	18	3
4. Mental stress due to pandemic	16	4
5. Student lack of interest	14	5
6. Bulky course content for a modular setup	13	6
7. Lack of personal motivation	12	7
8. Lack of skills and knowledge in manipulating technology base materials and equipment	10	8
9. Lack of engagement and interaction with LSENs	10	8
10. Lack of enough resources	8	9
11. Delay in the timing of the lecture	5	10
12. Lack of instruction and information	5	10
13. Poor communication system	4	11
14. Poor classroom management	2	12
15. Poor time management	2	12

The table shows that the *Lack of network connectivity* ranks 1. A *Heavy workload followsthis from home, and school activity* ranks 2. Also, the indicator *Lack of technical materials and equipment* ranks 3. In contrast, the indicators "Poor classroom management" and "Poor time management" ranks last at rank 12.

The number 1 (one) challenges encountered by teachers' respondents is lack of network connectivity. Out of 38 (Thirty-eight) participants, 27 (Twenty-seven) of them have connectivity issues. There are 9 (nine) teachers' respondents from Bantayan Central Elementary Schools – SpEd Center, 1 (one) in Don Vicente Rama Memorial Elementary School - SpEd Center and 17 (seventeen) from Mandaue City Central Special Education School.

During the pandemic some this issue is very relevant to argument between the educational sector, parents and other stakeholders on how to implement the online mode of learning because not all of the LSENs is notcable to have a stable internet connection as well as the teachers especially those LSENs leaving in the mountainous and remote area. Distance learning is challenging for instructors, students, and families in developing nations due to a lack of internet connectivity, information technology, instructional materials, and digital technology skills (Mustafa, 2020). Rural communities lack the necessary network infrastructure to provide instruction remotely. Due to limited number of computers, internet access, mobile network access, and lack of ICT trained teachers in developingcountries (O'Hagan, 2020).

Out of 38 (Thirty-eight) participants, 22 (twenty-two) of them have connectivity issues. There are 9 (nine) teachers' respondents from Bantayan Central Elementary Schools – SpEd Center, and 13 (thirteen) from Mandaue City Central Special Education School. This implies that heavy workloads and other non-related teaching works of the teacher's respondents are the 2nd challenges encountered in this pandemic. This challenge encountered can burn out the SpEd teachers.

According to Yuker (1984), a primary factor in teacher burnout is workload, defined as all the activities that are related to professional duties and responsibilities of a teacher including teaching, interacting with students, service to the school and community, and professional development.

Increased workloads were a primary contributor to teachers' burnout and lack of work-life balance during the pandemic (Marshall et al., 2022; Rebecca et al., 2020; Toropova et al., 2021) and can cause a wide impact to SpEd teachers to be more efficient and effective in theirperformance during the pandemic.

Something that adds to their burden is the implementation of Hyflex Teaching. Additionalresponsibilities for many included HyFlex teaching - something for which teachers were never trained (Thompson et al., 2020). Therefore, increasing teacher stress and frustration have also been linked to a higher emphasis on teacher performance and accountability (Toropova et al., 2021). With these challenges encountered by the teachers respondent, the SpEd teachers experiencing diminished well-being at school are less able to provide high quality teaching and tend to leave the profession earlier (OECD, 2021). Across a variety of studies it has been found that well-being and satisfaction can coexist with reports of stress and demands as shown for example by low negative correlations of well-being and demands (Burns and Machin, 2013), well-being and extra duties (Collie and Martin, 2017), or well-being and workload (Lavy and Eshet,
2018).

The 3rd challenges of teacher's respondents are Lack of technical materials and equipment.

There are 21 participants who are SpEd and Receiver teachers. 6 teachers are from Bantayan Central Elementary Schools – SpEd Center, 4 from Don Vincente Rama Memorial Elementary School - SpEd Center, and 11 from Don Vincente Rama Memorial Elementary School - SpEd Center who express that lack of leaning resources, material and equipment's can be a factor to effectively implement the HyFlex teaching using the TPACK Model of LSENs.

The primary challenges both teachers and learners face are limited access to the network, power cut, issues related to learner engagement, possession of low-end devices and lack of competence to handle web tools and online resources which are in line with the findings of Khan et al. (2012) and Laudari and Maher (2019). The lack of new trend materials like high tech materials and equipment is a great challenge to SpEd teachers because it hinders them to properlyexecute the individualize educational plan they prepared for LSENs to address their different needs. According to Grubic et al., (2020), teachers also have come under increased pressure not only to provide learning resources to their children or conduct lessons online but also to supervise their students' learning.

Highly digitize materials can be effectively used to properly assist the learners in their different developmental needs without this materials and equipment is teachers may take a lot of time to prepare and organize how they will assist the LSENs. With this happening teachers may prefer to stop implementing new technologies in their classrooms (Yadov, Gupta, & Khetrapal, 2018) because they have been unable to cope with the transition due to limited resources and inadequate infrastructure (Salmi et al., 2020). Delivering learning to homes has been challenging to teachers in most under-resourced contexts, where the accessibility, availability, and use of technology in education are not widespread (Khan et al., 2012).

Q. Test Of Significant Relationship

The study hypothesized that the teachers' level of competencies in integrating the TPACKModel into HyFlex Teaching and Learning have significant relationships with their profiles. Table49 shows the results.

Table 49
Relationship Between the Respondents' Level of Competency in Integrating TPACK Modelinto HyFlex Teaching and Learning and their Profiles
(alpha = 0.05)

Variables	Chi- Square	df	Critical Value	SignificanceResult
Level of Competency and				
Age	5.3146		12.592	Not significantHo accepted
Gender	0.6972		5.991	Not significantHo accepted
Civil Status	4.3986		12.592	Not significantHo accepted
Highest Educational Attainment	8.5906		12.592	Not significantHo accepted
No. of Years in Teaching LSENs	6.8674		9.488	Not significantHo accepted
Type of Classroom	1.1222		5.991	Not significantHo accepted
No. of LSENs in class	6.8764		9.488	Not significantHo accepted
Relevant Training/Seminars/Workshops	12.4526		12.592	Not significantHo accepted

The table shows that the teachers' profiles (age, gender, civil status, highest educational attainment, number of years in teaching LSENs, type of classroom, number of LSENs in class, andrelevant training, seminars, and workshop attended) do not have significant relationships with each other. The computed Chi-square values are significantly lower than their respective critical values. Thus, the null hypothesis was accepted. That is, their competency level has significant relationships with their profiles.

III. SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter presents the findings, conclusion, and recommendations based on the presented data and information gathered, evaluated, analyzed, and correlated.

A. Summary

This research evaluated the competency level of teachers handling LSENs as they integrate the Hybrid-Flexible (HyFlex) mode of teaching in Mandaue City Central Special Education School, Don Vincente Rama Memorial Elementary School-Sped Center, and Bantayan Central School-SpEd Center for the school year 2022-2023 as basis for proposed action plan.

It employed a descriptive correlational study to gather data regarding the competency levelof teachers in handling LSENs.

This research was conducted at three different public schools namely: Bantayan Central Elementary School– SpEd Center at Bantayan Cebu with five SpEd teachers and six receiving teachers, Don Vicente Rama Memorial Elementary School- SpEd Center at Macopa St., Basak San Nicolas, Cebu City with five SpEd teachers and one receiving teacher, and Mandaue City Central Special Education School which is located at CatalinoLl, Ouano Ave. with 21 SpEd teachers.

The study used an adapted research instrument from the research of Sonmez Pamuk, Mustafa Ergun, Recep Cakir, H. Bayram Yilmaz & Cemalettin Ayas (2015). The researchers of the study use the TPACK survey instrument. The gathered data were statistically treated using frequency, simple percentage, rank, weighted mean, standard deviation, and Chi-square test of independence.

B. Findings

On the profile of the respondents, the study reveals that that about 36.84% of the respondents are aged 30 to 39, females, married, **M**asters Level, 1 to 10 years of experience teaching LSENs, teaching in a Self-Contained classroom involving majority of the LSENs havingIntellectual Disability. Also, it reveals that most teachers are handling 1 to 10 LSENs in a class. These teachers have attended 61 or more hours of training, seminars, and workshops on handlingLSENs.

On the level of competency in handling LSENs, the table reveals that the teachers' competencies in content knowledge and pedagogical knowledge got the highest mean of 3.29 (Highly Competent). In contrast, their competency in technological knowledge got the lowest mean of 3.16 (Competent).

On the challenges of teachers in handling LSENs using the Asynchronous and Synchronous modes, the study reveals that the *Lack of network connectivity* ranks 1. A *Heavy workload follows this from home, and school activity* ranks 2. Also, the indicator *Lack of technicalmaterials and equipment* ranks 3.

In contrast, the indicators "Poor classroom management" and "Poor time management" ranks last at rank 12.

On the test of significant relationship, the study reveals that the teachers' profiles (age, gender, civil status, highest educational attainment, number of years in teaching LSENs, type of classroom, number of LSENs in class, and relevant training, seminars, and workshop attended) donot have significant relationships with each other.

C. Conclusion

This study concluded that SpEd teachers are competent in handling LSENs as they integrate HyFlex mode of teaching LSENs in Mandaue City Central Special Education School, Don Vincente Rama Memorial Elementary School-Sped Center, and Bantayan Central ElementarySchool-SpEd Center.

D. Recommendations

The researchers strongly recommend to implement the action plan in applying the TPACKModel for Hyflex teaching and learning to help teachers to be more efficient to provide quality instructions to address the needs of LSENs.

IV. OUTPUT OF THE STUDY

A. Development Plan

Presented in this chapter is the output of the study. It consists of a list of objectives or indicators that needs to be improved in integrating the TPACK Method in HyFlex teaching and learning for LSENs of the different research environments: Bantayan Central Elementary School- SpEd Center, Don Vicente Rama Memorial Elementary School- SpEd Center, and Mandaue CityCentral Special Education School.

B. Description

The proposal consists of various strategies and activities to implement the action plan in applying the TPACK Model for Hyflex teaching and learning to help teachers to be more efficientto provide quality instructions to address the needs of LSENs.

C. Rationale

This research study assessed the level of competency of teachers in integrating TPACK method in HyFlex teaching and learning for LSENs at Bantayan Central Elementary School - SpEdCenter, Don Vicente Rama Memorial Elementary School- SpEd Center, and Mandaue City Central Special Education School as the basis for Development Plan.This study delved the profile of the research respondents: SpEd teachers and Receiving teachers and their competency in integrating TPACK method in HyFlex teaching and learning for LSENs. Based on the result, a matrix is presented with the list of strategies and activities to improve the status of the indicators suggested.Mainly, teacher's competency in in integrating TPACK method in HyFlex teaching and learning for LSENs.

D. Objectives

The following aims were purposively set to respond to the statement of theproblems and its sub-variables to with:

1) To strengthen and improve the level of competency of respondent-teachers in integrating the TPACK model into a Hyflex teaching and learning for LSENs
2) To address the challenges being encountered in implementing the HyFlex teaching and learning for LSENs using the TPACK Model.
3) To appreciate the integration of TPACK method to HyFlex teaching and learning forLSENS.

E. Scheme of Implementation

To enforce the proposed development plan, the researchers follow the protocol from the authorities should be considered. A letter request for endorsement is submitted to the Division Supervisors at Cebu Province, Cebu City, and Mandaue City. Aside from the letter of intent or approval, the matrix or the development plan is also attached for approval.

When these are alreadyaffirmed from the different offices, the researchers who wish to execute the development plan mayperfectly follow, modify the strategies and activities depending on level of competency of the teacher's respondents or reject the designed matrix. Nonetheless, it is a great accomplishment on behalf of the researchers to acknowledge this endeavor and be able to implement the developmentplan with a good purpose to the SpEd teachers and receiving teachers.

F. Action Plan Matrix

Bantayan Central Elementary School – SpEd Center								
Areas of Concerns	Objectives	Strategies	Persons Involve	Budget	Source of Budget	Time Frame	Expected Outcome	Actual Accomplishment	Remarks
Technological Knowledge	Enhance a classroom with individualize learning events and allowing SpEd teachers to provide greater flexibility and differentiation in teaching LSENs.	To conduct a training, practical practice and a seminar on how to use technology effectively.	SPED and Receiving teachers, Person expert in Technology. Other important stakeholders	18,000 Pesos	MOOE	October 2022 to June 2023	The teachers enhanced the classroom using applying technological knowledge and the teacher will be more flexible.		
Content Knowledge	Recognize individual differences and adjust instructions that best suit the learners.	Attend seminars that are related to the individual differences of the learners and instructions needed.	SPED and Receiving Teachers, Expert in SPED. Other regular teachers a stakeholder	18,000 Pesos	MOOE	October 2022 to June 2023	Teachers attended seminars a can able to refresh knowledge and can recognize the individual differences of the learners and able to provide instructions that suit to the learners.		
Pedagogical Knowledge	Equip in the different aspects in facilitating students' learning	Open forum/group sharing Workshops or seminars	SPED and Receiving Teachers, Expert in SPED. Other regular teachers and stakeholders	18,000 Pesos	MOOE.	October 2022 to June 2023	Teachers can share with the group their ways and strategies and well equip in facilitating students learning		
Pedagogical Content Knowledge	Play valid and vital roles in the classroom	Conduct a training or refresher course about the roles of the teachers in the classroom.	Teachers, Expert in SPED. Other regular teachers and stakeholders	18,000 Pesos	MOOE.	October 2022 to June 2023	Teachers attended the training and able to identify the vital and valid roles of being a teacher.		
Technological Pedagogical Knowledge	Understand the need of the learners to be motivated in doing their work well	More exposure with LSENs Attend workshops and seminars	Teachers, Person Expert in SPED. Person Expert in Technology. Other regular teachers a stakeholder	18,000 Pesos	MOOE.	October 2022 to June 2023	Teachers have more exposure with the LSENs and attended lots of seminars.		
Technological Content Knowledge	*Use technology to offer various learning opportunities and approaches that engage, instruct, and support LSENs with various tactics designed to appeal to individual learners*	Practical practice in technology Conduct seminars and workshops	Teachers, Person Expert in SPED. Person Expert in Technology. Other regular teachers a stakeholder	18,000 Pesos	MOOE	October 2022 to June 2023	Teachers attended the seminars and workshops and able to have a practical practice with technology. Teachers can able to use technology.		
Technological Pedagogical Content Knowledge	Exert effort to lead LSENs into a meaningful, stimulating, and satisfying life.	More exposure with the LSENs Community service for the awareness Seminars and workshops	Teachers, Person Expert in SPED. Person Expert in Technology. Other regular teachers an, stakeholders	18,000 Pesos	MOOE.	October 2022 to June 2023	The teachers are more expose with LSENs and can do the community services and able to attend seminars and workshops.		

Don Vicente Rama Memorial Elementary School-Sped Center

Areas of Concerns	Objectives	Strategies	Persons Involve	Budget	Source of Budget	Time Frame	Expected Outcome	Actual Accomplishment	Remarks
Technological Knowledge	Gain knowledge and experiences with the latest trend of technology applied in education	1. Provide adequate training (in-service teacher training involving ICT) 2.Seminar from tech-savvy volunteers or ICT coordinator of school 3.Workshop on the new technologies	Spec Teachers, Receiving Teachers,	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers adapt to the new technology		
Pedagogical Knowledge	Apply appropriate teaching styles for LSENs	1. Maximize instructional time and foster individual learning progress 2. Have various teaching methods for each type of LSENs 3. Know when to apply each method	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers have specialized knowledge for creative teaching for all LSENs		
Content Knowledge	Explain background details of concepts and definitions in Special Education	1. Seminar on the current trends of Special Education 2. Reading and analyzing curriculum guides 3. Identify the strengths and weaknesses of different learners and must have the knowledge to work with students who have specific learning disabilities or need	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers understand subject matter deeply and flexibly		
Technological Pedagogical Knowledge	Integrate technology during student engagement with the subject matter	1. Structure technology-based instruction and teaching approaches 2. Attend professional development workshop or courses involving technology-focused in the curriculum of Special Education	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers use technology to maximize instruction in the class		
Technological Content Knowledge	Use technology to support students in deeper inquiry about the content, concepts, and relationships with other subject matters	1. Use technology to redesign curriculum in Special Education 2. Provide another set of ways to assess LSENs understanding and learning using technology	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers can use technology to make their own work more productive		
Pedagogical Content Knowledge	Customize lesson that are appropriate to LSENs	1. Select, organize, and implement subject matter that are based in the individual educational plan of the LSENs	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers design a curriculum with the consideration of the LSENs needs		
Technological Pedagogical Content Knowledge	Integration of technology in teaching and learning of LSENs	1. Attend seminars about TPACK 2. Follow researchers on institution/school applying TPACK Method in the curriculum 3. Apply technology-related approaches in Special Education	Spec Teachers, Receiving Teachers	18,000 Pesos	MOOE, LGU Donation	October 2022 to June 2023	The teachers create an interactive, accurate, and effective unique teaching and learning environment		

Mandaue City Central Special Education School										
Areas of Concerns	Objectives	Strategies	Persons Involve	Budget	Source of Budget	Time Frame	Expected Outcome	Actual Accomplishment	Remarks
Technological Knowledge	1. Execute the basic to complex system troubleshoot and perform other technical remedy	1. Training and seminar about technical actions in encountering some technical issues and problem. 2. Advance Training and Seminar for Technology Management. 3. ICT cell group planning and innovation for HyFlex Learning and Teaching	IT expert, Teachers, School leaders, ICT Coordination	18,000 Pesos	NGO MOOE	October 2022 to June 2023	Teachers will make a knowledge-based manual stated and indicated a step by step procedures on how to solve some technical issues and problems encountered by teacher's		
Content Knowledge	2. Show an act of being expert on their filed of specialization by explaining some concepts in a simple for the better understanding of all	1. To have a refresher session with colloques and other experts of the field 2. To have centralize developmental plan for content modification	Educational Experts, Master teacher, School Head, co-teacher	18,000 Pesos	NGO MOOE	October 2022 to June 2023	Teacher conduct a seminar about special education and provide insights for the community to be more aware about what is the importance of the program.		
Pedagogical Knowledge	3. Apply different pedagogy and Cybergogy of teaching	1. Conduct a teaching observation and peer mentoring to have a collaborative idea to what strategies, methods and approaches of teaching they can apply. 2. To have a cell group discussion about challenges encounter and to talk how they can cope up with those challenges.	Educational Experts, Master teacher, School Head, co-teacher	18,000 Pesos	NGO MOOE	October 2022 to June 2023	Teachers demonstrate variety of teaching styles to concretely deliver the lesson to the students.		
Pedagogical Content Knowledge	4. Demonstrate an effective way of teaching for a specific lesson or content in the curriculum that its appropriately to the development level of the LSENs	1. Conduct monthly coaching and mentoring to give one on one suggestion on how to use a teaching style for a particular subject matter.	Educational Experts, Master teacher, School Head, co-teacher	18,000 Pesos	NGO MOOE Donation,	October 2022 to June 2023	To design and execute the learning plan for LSENs to address their educational challenges and needs.		
Technological Pesagogical Knowledge	5. To use a specific technology to provide a relevant and concreate experience to LSENs	1. To conduct a workshop about technology integration for teaching strategies. 2. Workshop ICT integration for teaching LSENs	IT expert, Teachers, School leaders, ICT Coordination	18,000 Pesos	NGO MOOE Donation,	October 2022 to June 2023	Teachers will demonstrate create interactive learning task and can share and introduce it with other teachers.		
Technological Content Knowledge	6. To choose a technical equipment's and materials that can be useful to bridge the content to have a meaningful learning experience.	1. Training for modification of the content and appropriate technical materials use for specific modification of the content 2. Content modification with the integration of technology for different exceptionalities	IT expert, Teachers, School leaders, ICT Coordination	18,000 Pesos	NGO MOOE Donation,	October 2022 to June 2023	Teacher create a curriculum plan that indicates some important aspect to consider and used like appropriate technology to use.		
Technological Pedagogical Content Knowledge	3. To Integrate the technology to have systematic way of teaching for LSENs	To conduct a seminar and training to apply technological related approaches and techniques in teaching LSENs Training Technology integration for SpEd Teaching.		18,000 Pesos	NGO Donation, MOOE	October 2022 to June 2023	Teacher can be more expert in applying technology in different strategies that suits to the developmental capability of the LSENs.		

VI. ACKNOWLEDGMENTS

Education. It may just be a word but many people strived to work hard for it. When a personaspires to live a life with purpose, then strive to have a good spiritual devotion and good education.Fortunately, we have Cebu Technological University – Main Campus to help us live a good lifewith a purpose. It is with deep pleasure to express her heartfelt thanks to all the people who supported her in this endeavor by spending their quality time and effort in the completion of this thesis:

To Dr. Rosein A. Ancheta, Jr., University President of the Cebu Technological UniversitySystem;

To Dr. Niña Rozanne T. Delos Reyes, our thesis adviser, who extended her motherly careto us and provided us advice that can be useful for our professional progress.

To Dr. Jonathan O. Etcuban, our statistician. You taught us how to be rational individualsby letting us analyze and understand things in a better perspective.

To other members of the Thesis Committee: Dr. Reylan G. Capuno, Dr.

Raymond C. Espina, Dr. Ramil P. Manguilimotan, Dr. Gengen G. Pardillo, and Dr. Rebecca Manalastas, for making this thesis a reality by imparting us your knowledge and guiding us especially during the design hearing and oral defense.

Our big gratitude to our professors since the very start of our journey in CTU. We have learned how to be a thinker, passionate and innovative teacher. The knowledge, skills, and valuesmade us competitive educators in the field.

Special thanks to Dr. Rhea Mar A. Angtud, Dr. Nimfa D. Bongo, and Dr. Marilyn S. Andales for granting us the permission to conduct our research in your respective schools from your respective districts.

To our dear Respondents, who willingly took part in this research. This would not have been possible without your cooperation.

Lastly, to the Almighty God, our loving and gracious Heavenly Father, to You we lay our lives, to you we offer our service and loyalty, and to You alone we praise and worship. Your lovesuffices, your power abounds.

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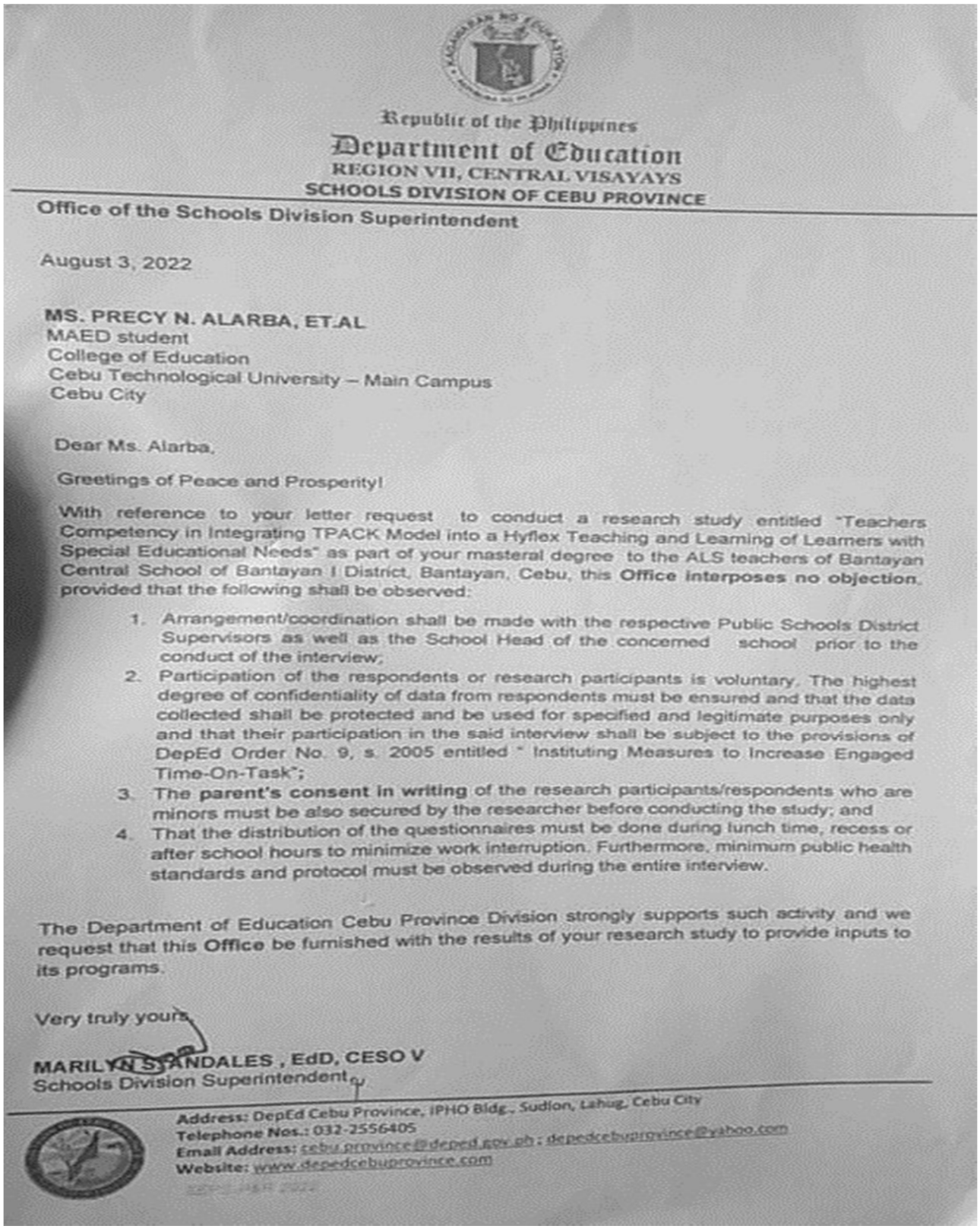
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

APPENDICES
APPENDIX AZ TRNSMITTAL LETTERS



Republic of the Philippines
Department of Education
REGION VII, CENTRAL VISAYAYS
SCHOOLS DIVISION OF CEBU PROVINCE

Office of the Schools Division Superintendent

August 3, 2022

MS. PRECY N. ALARBA, ET.AL
MAED student
College of Education
Cebu Technological University – Main Campus
Cebu City

Dear Ms. Alarba,

Greetings of Peace and Prosperity!

With reference to your letter request to conduct a research study entitled "Teachers Competency in Integrating TPACK Model into a Hyflex Teaching and Learning of Learners with Special Educational Needs" as part of your masteral degree to the ALS teachers of Bantayan Central School of Bantayan I District, Bantayan, Cebu, this **Office interposes no objection**, provided that the following shall be observed:

1. Arrangement/coordination shall be made with the respective Public Schools District Supervisors as well as the School Head of the concerned school prior to the conduct of the interview;
2. Participation of the respondents or research participants is voluntary. The highest degree of confidentiality of data from respondents must be ensured and that the data collected shall be protected and be used for specified and legitimate purposes only and that their participation in the said interview shall be subject to the provisions of DepEd Order No. 9, s. 2005 entitled " Instituting Measures to Increase Engaged Time-On-Task";
3. The **parent's consent in writing** of the research participants/respondents who are minors must be also secured by the researcher before conducting the study; and
4. That the distribution of the questionnaires must be done during lunch time, recess or after school hours to minimize work interruption. Furthermore, minimum public health standards and protocol must be observed during the entire interview.

The Department of Education Cebu Province Division strongly supports such activity and we request that this **Office** be furnished with the results of your research study to provide inputs to its programs.

Very truly yours,

MARILYN S. ANDALES , EdD, CESO V
Schools Division Superintendent

Address: DepEd Cebu Province, IPHO Bldg., Sudlon, Lahug, Cebu City
Telephone Nos.: 032-2556405
Email Address: cebu.province@deped.gov.ph ; depedcebuprovince@yahoo.com
Website: www.depedcebuprovince.com

Republic of the Philippines
Department of Education
REGION VII – CENTRAL VISAYAS
Schools Division of Cebu City

Office of the Schools Division Superintendent

August 18, 2022

Ms.PRECY ALARBA, et.al,
Researchers
Cebu Technological University
Cebu City

Dear Ms. Alarba,et.al, :

Greetings of Peace!

This has reference to your letter request to conduct a study entitled "Teachers Competency in Integrating TPack Model into a Hyflex Teaching and Learning of Learners with Special Educational Needs" to the SPED Teachers of Don Vicente Rama Memorial Elementary School of Cebu City division this first week of September 2022.

Please be informed that this office has no objection to the same provided that you have to coordinate with the principal of the school and practice the proper protocol , that teachers should be well-informed and motivated to cooperate and participate in this study and that results of the study be furnished to this office.

Please be guided accordingly.

Thank you.

Very truly yours,

RHEA MAR A. ANGTUD EdD
Superintendent
Office of the Schools Division Superintendent

RMAA/BAS/cng

Address: New Imus Ave., Barangay Day-as, Cebu City
Telephone Nos.:2551516
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ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

TRANSMITAL LETTER

July 18, 2022

NIMFA D. BONGO, Ed.D., CESO V
Schools Division Superintendent
DepEd Mandaue City
Plaridel Street, Centro, Mandaue City

Subject: **REQUEST FOR APPROVAL TO CONDUCT THE RESEARCH**

Dear **Dr. Bongo:**

Greetings! This is to respectfully to inform your respected office that the undersigned is recently engaging in thesis writing with the title "**TEACHERS COMPETENCY IN INTEGRATING TPACK MODEL INTO A HYFLEX TEACHING AND LEARNING OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS**".

In this regard, the Mandaue City Special Education School has been chosen as the research environment, where the teachers will be purposively invited to be the respondents of this empirical work.

Rest assured that the ethical standards shall be considered in the process of administering the survey questionnaire, the collecting data, and the presentation of the scientific results.

As such, this is to formally seek approval to conduct the research in such locale.

Thank you, more power and may God bless us all.

Respectfully Yours,

PRECY N. ALARBA
Researcher

MYLEN B. GADOR
Researcher

ANGELO G. LUGO
Researcher

Noted By:

NINA ROZANNE T. DELOS REYES, Dev. Ed. D.
Thesis Adviser

REYLAN G. CAPUNO, Ph.D., Dev.Ed.D.
Dean College of Education

Approved:

NIMFA D. BONGO, Ed.D., CESO V,
Schools Division Superintendent

APPENDIX B
INFORMED CONSENT FOR THE TEACHERS-RESPONDENTS

July 15, 2022Dear Teacher-respondents:

Greetings! This is to respectfully to inform you that the undersigned is recently engaging in thesis writing with the title "TEACHER'S COMPETENCIES IN INTEGRATING TPACK MODEL INTO A HYFLEX TEACHING AND LEARNING OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS" this school year 2022-2023.

Since the study shall focus on teacher involvement, your participation as one of the respondents would contribute to the success of this empirical undertaking in this regard, this is to formally invite and seek your consent to partake in the survey.

Rest assured that the ethical standards shall be considered in the process of administering the survey questionnaire, the collecting data, and the presentation of the scientific results.Moreover, please be informed that tje beneficiaries of this research are your students with special needs . Furthermore, the study will cost no harm to them as they will not be called to engage in the survey.

Should you confirm to join, kindly signify conformance by signing on the space providedhereunder.

Thank you, more power and may God bless us all.Respectfully Yours,

PRECY N. ALARBA — Researcher

MYLEN B. GADOR — Researcher

ANGELO G. LUGO — Researcher

NINA ROZANNE T. DELOS REYES, Dev. Ed. D.
Thesis Adviser

REYLAN G. CAPUNO, Ph.D.
Dean College of Education

Respondent Signature and Date
Dear Teacher-respondents:Greetings!

APPENDIX C SURVEY QUESTIONNAIRE

This is to respectfully inform you that the undersigned is recently engaging in thesis writing with the title "TEACHER'S COMPETENCIES IN INTEGRATING TPACK MODEL INTO A HYFLEX TEACHING AND LEARNING OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS".

Since the study shall focus on teacher involvement, your participation as one of the respondents would contribute to the success of this empirical undertaking in this regard, this is to formally invite and seek your consent to partake in the survey.

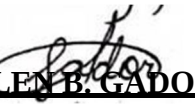
Rest assured that the ethical standards shall be considered in the process of administering the survey questionnaire, the collecting data, and the presentation of the scientific results. Moreover, please be informed that the beneficiaries of this research are your students with special needs. Furthermore, the study will cost no harm to them as they will not be called to engage in the survey.

Should you confirm to join, kindly signify conformance by signing on the space providedhereunder.

Thank you, more power and may God bless us all.Respectfully Yours,

PRECY N. ALARBA — Researcher

MYLEN B. GADOR — Researcher



ANGELO G. LUGO — Researcher

A. Part I. Demographic Profile

Please put a check mark (✓) on the circle before your answer.Age:____years old

Gender

O Male O Female

Civil Status:

O Single O Separated

O Married O Widow

Highest Educational AttainmentO College Graduate

O Master Level

O Master's GraduateO Doctoral Level

O Doctoral Graduate Others _____

Number of years teaching Learners with Special Educational Needs:_____years

Type of classroom: **(Please Select Only One)**

O Self-contained O Inclusive setting

Others_____

Exceptionalities handled **(Multiple Response)**

O Intellectual Disability (ID)

O Autism Spectrum Disorder (ASD)

O Specific Learning Disabilities (SLD)

O Emotional and Behavioral Disturbance (EBD)O Orthopedic Disability

O Hearing Impairment (HI)

O Visual impairment (VI)O Gifted and Talented

O Other health impairmentsOthers _____

Number of LSENs in class _____

Total Hours of Trainings and Seminar attended related to Special Education Program: _____ hours

B. Part II: Teachers Competency in handling LSENs using TPACK MODEL for HyFlexteaching.

Direction: For each item, please select your level of competency by putting a check mark (✔) inthe appropriate box using the scale below:

Highly Competent (4)- demonstrates **in depth** proficiency level; is able to assist, consult or lead others in the application of aCompetency

Competent (3) - demonstrates a **working or functional** proficiency level which enables the competency to be exercised effectively has working or functional command of thecompetency

Less Competent (2) - demonstrates **limited use** of a competency and requires additional training to apply without assistanceor frequent supervision

Not Competent (1) - demonstrates a **minimal use** of the competency and is currently developing it

1) Technological Knowledge

	4	3	2	1
	Highly Competent	Competent	Less Competent	Not Competent
1. Can learn technology easily				
2. Can easily solve some of the technical problems I encounter				
3. Know how to seektechnology help				
4. Have sufficient knowledge and experience with the mostrecent technologies				
5. Can help my friends in theiruse of different technologies				
6. Use different technologiesregularly for different purposes (i.e., communication, typing, internet)				
7. Try different technologies inmy free time				

2) Content Knowledge

"My field" indicates your teaching area

	4	3	2	1
	Highly Competent	Competent	Less Competent	Not Competent
1. Have sufficient knowledge inmy field				
2. Know basic concepts such asdefinitions in my field				
3. Understand the structure (organizations) of topics ofcontent I teach				
4. Can present the same subjectmatter at different levels				
5. Can explain backgrounddetails of concepts and definitions in my field				
6. Have adequate knowledge inexplaining relations among different concepts on the subject matter				
7. Can make connections with content I teach and daily life				

3) Pedagogical Knowledge

In this section, you are asked for your thoughts on teaching and learning in general

	4	**3**	**2**	**1**
	Highly Competent	**Competent**	**Less Competent**	**Not Competent**
1. Can use different approaches toteach				
2. Can select appropriate teachingstyles for students from different backgrounds				
3. Can use a variety of tools(approaches) to assess students' learning				
4. Consider students' backgrounds, interest, motivation, and other needs in my teaching				
5. Can plan individual and grouplearning activities effectively				
6. Have knowledge in differentpedagogies of teaching and learning				
7. Have knowledge in different components of teaching (i.e., instruction, assessment)				

4) Pedagogical Content Knowledge

In this section, you are asked to share how you can implement your general pedagogicalknowledge and experiences in teaching and learning into your area of teaching

	4	3	2	1
	Highly Competent	Competent	Less Competent	Not Competent
1. Can select teachable content of thesubject matter appropriate to students' level				
2. Can teach the same subject matterto students at different levels				
3. Can adjust my teaching accordingto level of ease and difficulties with learning of specific subject matter				
4. Can use different methods and approaches to represent specificcontent				
5. Can generate alternative teaching approaches according to students'levels				
6. Have sufficient knowledge intransforming students' misconceptions				
7. Can use analogies, examples, and demonstrations to support students' learning				

5) Technological Pedagogical Knowledge

In this section, you are asked to share your thoughts on how you can use technology to supportyour pedagogical approach.

	4	3	2	1
	Highly Competent	**Competent**	**Less Competent**	**Not Competent**
1. Can use technology to assessstudent's learning				
2. Can use technology to identifyindividual differences among students				
3. Can use technology to advance my teaching andstudents' learning				
4. Can use technology to bringstudents' individual differences (learning preferences, content background, academic level)into the classroom				
5. Can use technology to enrichdifferent components (i.e. lecturing, examples, and assessment) of teaching activity				
6. Can use technology to engagestudents with content				
assessment, presentation,motivation)				

6) Technological Content Knowledge

In this section, you are asked to share your thoughts about how you can use technology with thecontent you teach

	4	3	2	1
	Highly Competent	**Competent**	**Less Competent**	**Not Competent**
1. Can use technology topresent the content in different ways				
2. Can use technology to enrichthe content				
3. Can use technology to demonstrate unobservablefacts, concepts, and principles of the content				
4. Can use technology to accessadditional resources about content that may otherwise not be available				
5. Can use technology to provide students with opportunities in exploringcontent by themselves at their own individual pave				
6. Can use technology to support students in deeper inquiry about the content, concepts, and relationshipswith other subject matters				
7. Can use technology in teaching to provide differentforms of content				

7) Technological Pedagogical Content Knowledge

In this section, you are asked to share your thoughts about how you can use technology in yourteaching

	4	3	2	1
	Highly ompetent	**Competent**	**Less Competent**	**Not Compete nt**
1. Can use technology in teaching the specific content within the defined pedagogical approach in agiven context				
2. Can use technology in such a waythat students feels its positive impact in their learning of specific subject matter				
2. Can use technology to organizemy teaching and students' learning specific content 3.				
4. Can use technology to bring real-life experiences, examples, and analogies about specific content				
5. Can use technology to identify learners' individual differences on understanding of the content				
6. Can use technology to make specific subject matter comprehensible by students fromdifferent backgrounds				
7. Can use technology to provide opportunities to each students inthe classroom to contribute to learning activity related to specific content				

C. PART III.

Direction: Please answer the following questions. Check the circle of your response. (Multipleresponse)

What are the challenges encountered by the teacher's respondent in the HyFlex classes ofLSENs?

O Bulky course content for modular set upO Student lack of interest
O Lack of technical materials and equipmentO Poor classroom management
O Delay in timing of lecture
O Lack of skills and knowledge in manipulating technology base materials and equipmentO Lack of instruction and information
O Lack engagement and interaction to LSENsO Poor communication system
O Poor time management
O Lack of network connectivityO Lack of enough resources
O Heavy workload due to home and school activityO Lack of personal motivation
O Mental stress due to pandemic

Appendix D
Statistical Results using Minitab Software for Bantayan Central School
———— 10/09/2022 9:06:54 AM ————————————————————

Descriptive Statistics: Age, Years, NoLSENs, Total

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Age	11	0	45.55	2.51	8.31	33.00	36.00	49.00	52.00	55.00
Years	11	0	15.27	1.94	6.42	4.00	10.00	17.00	20.00	26.00
NoLSENs	11	0	10.64	2.00	6.64	3.00	5.00	10.00	15.00	24.00
Total	11	0	41.27	4.87	16.14	12.00	40.00	40.00	51.00	65.00

Tally for Discrete Variables: AgeG, Gender, CvlStat, EducAtt, YearsG

AgeG	Count	Percent	Gender	Count	Percent	CvlStat	Count	Percent
30-39	4	36.36	Female	7	63.64	Married	8	72.73
40-49	2	18.18	Male	4	36.36	Single	3	27.27
50-59	5	45.45	N=	11		N=	11	
N=	11							

EducAtt	Count	Percent	YearsG	Count	PercentCG	1	9.09	1-10	4	36.36
MG	1	9.09	11-20	5	45.45					
ML	9	81.82	21-30	2	18.18					
N=	11		N=	11						

Tally for Discrete Variables: ID, ASD, EBD, OD, HI, VI, Others

ID	Count	Percent	ASD	Count	Percent	EBD	Count	Percent
1	4	100.00	1	3	100.00	1	1	100.00
N=	4		N=	3		N=	1	
*=	5		*=	4		*=	2	

OD	Count	Percent	HI	Count	Percent	VI	Count	Percent
1	3	100.00	1	4	100.00	1	2	100.00
N=	3		N=	4		N=	2	
*=	6		*=	7		*=	5	

Others	Count	Percent
1	1	100.00
N=	1	

Tally for Discrete Variables: NoLSENsG, TotalG

NoLSENsG	Count	Percent	TotalG	Count	Percent	1-10	8	72.73	1-20	2	18.18
11-20	1	9.09	21-40	4	36.36						
21&ab	2	18.18	41-60	4	36.36						
N=	11		61&ab	1	9.09						
			N=	11							

Descriptive Statistics: A1, A2, A3, A4, A5, A6, A7, B1, ...

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
A1	11	0	3.091	0.251	0.831	2.000	2.000	3.000	4.000	4.000
A2	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000
A3	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000

A4	11	0	2.727	0.273	0.905	1.000	2.000	3.000	3.000	4.000
A5	11	0	2.727	0.333	1.104	1.000	2.000	3.000	4.000	4.000
A6	11	0	3.000	0.234	0.775	2.000	2.000	3.000	4.000	4.000
A7	11	0	2.727	0.333	1.104	1.000	2.000	3.000	4.000	4.000
B1	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
B2	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
B3	11	0	3.273	0.141	0.467	3.000	3.000	3.000	4.000	4.000
B4	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
B5	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
B6	11	0	3.273	0.141	0.467	3.000	3.000	3.000	4.000	4.000
B7	11	0	3.182	0.122	0.405	3.000	3.000	3.000	3.000	4.000
C1	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
C2	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
C3	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
C4	11	0	3.636	0.152	0.505	3.000	3.000	4.000	4.000	4.000
C5	11	0	3.364	0.203	0.674	2.000	3.000	3.000	4.000	4.000
C6	11	0	3.273	0.141	0.467	3.000	3.000	3.000	4.000	4.000
C7	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
D1	11	0	3.455	0.157	0.522	3.000	3.000	3.000	4.000	4.000
D2	11	0	3.182	0.226	0.751	2.000	3.000	3.000	4.000	4.000
D3	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
D4	11	0	3.182	0.182	0.603	2.000	3.000	3.000	4.000	4.000
D5	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
D6	11	0	3.273	0.195	0.647	2.000	3.000	3.000	4.000	4.000
D7	11	0	3.364	0.152	0.505	3.000	3.000	3.000	4.000	4.000
E1	11	0	3.000	0.270	0.894	2.000	2.000	3.000	4.000	4.000
E2	11	0	3.000	0.270	0.894	2.000	2.000	3.000	4.000	4.000
E3	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000
E4	11	0	2.909	0.211	0.701	2.000	2.000	3.000	3.000	4.000
E5	11	0	3.000	0.234	0.775	2.000	2.000	3.000	4.000	4.000
E6	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000
E7	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000
F1	11	0	3.000	0.234	0.775	2.000	2.000	3.000	4.000	4.000
F2	11	0	3.000	0.234	0.775	2.000	2.000	3.000	4.000	4.000
F3	11	0	2.909	0.211	0.701	2.000	2.000	3.000	3.000	4.000
F4	11	0	3.091	0.251	0.831	2.000	2.000	3.000	4.000	4.000
F5	11	0	2.818	0.263	0.874	2.000	2.000	3.000	4.000	4.000
F6	11	0	3.000	0.234	0.775	2.000	2.000	3.000	4.000	4.000
F7	11	0	2.727	0.237	0.786	2.000	2.000	3.000	3.000	4.000

G1	11	0	2.909	0.211	0.701	2.000	2.000	3.000	3.000	4.000
G2	11	0	2.818	0.226	0.751	2.000	2.000	3.000	3.000	4.000
G3	11	0	2.909	0.251	0.831	2.000	2.000	3.000	4.000	4.000
G4	11	0	2.909	0.211	0.701	2.000	2.000	3.000	3.000	4.000
G5	11	0	2.818	0.226	0.751	2.000	2.000	3.000	3.000	4.000
G6	11	0	2.818	0.226	0.751	2.000	2.000	3.000	3.000	4.000
G7	11	0	2.909	0.211	0.701	2.000	2.000	3.000	3.000	4.000

Tally for Discrete Variables: Ch1, Ch2, Ch3, Ch4, Ch5, Ch6, Ch8, Ch10, ...

Ch1	Count	Percent	Ch2	Count	Percent	Ch3	Count	Percent
1	6	100.00	1	6	100.00			
N=	6		N=	4		N=	6	
*=	4		*=	7		*=	2	

Ch4	Count	Percent	Ch5	Count	Percent	Ch6	Count	Percent
1	1	100.00	12	100.00		1	3	100.00
N=	1		N=2			N=	3	
*=	8		*=	7		*=	8	

Ch8	Count	Percent	Ch10	Count	Percent	Ch11	Count	Percent
1	3	100.00	1	11	00.00	1	9	100.00
N=	3		N=	1		N=	9	
*=	8		*=	7		*=	1	

Ch12	Count	Percent	Ch13	Count	Percent	Ch14	Count	Percent
1	2	100.00	1	9	100.00	1	4	100.00
N=	2		N=	9		N=	4	
*=	3		*=	2		*=	4	

Ch15	Count	Percent
1	6	100.00
N=	6	
*=	3	

Tabulated statistics: AgeG, Overall

Rows: AgeG Columns: OverallA D SA All

30-39	3	0	1	4
40-49	0	1	1	2
50-59	2	1	2	5
All	5	2	4	11

Pearson Chi-Square = 3.822, DF = 4 Likelihood Ratio Chi-Square = 4.976, DF = 4

Tabulated statistics: Gender, Overall

Rows: Gender Columns: OverallA D SA All

Female	3	2	2	7
Male	2	0	2	4
All	5	2	4	11

Pearson Chi-Square = 1.493, DF = 2 Likelihood Ratio Chi-Square = 2.145, DF = 2

Tabulated statistics: CvlStat, Overall
Rows: CvlStat Columns: OverallA D SA All
Married 4 1 3 8
Single 1 1 1 3
All 5 2 4 11
Pearson Chi-Square = 0.665, DF = 2 Likelihood Ratio Chi-Square = 0.616, DF = 2

Tabulated statistics: EducAtt, Overall
Rows: EducAtt Columns: OverallA D SA All
CG 1 0 0 1
MG 0 0 1 1
ML 4 2 3 9
All 5 2 4 11
Pearson Chi-Square = 3.056, DF = 4 Likelihood Ratio Chi-Square = 3.701, DF = 4

Tabulated statistics: YearsG, Overall
Rows: YearsG Columns: OverallA D SA All
1-10 3 0 1 4
11-20 2 2 1 5
21-30 0 0 2 2
Al 5 2 4 11
Pearson Chi-Square = 6.847, DF = 4 Likelihood Ratio Chi-Square = 7.748, DF = 4

Tabulated statistics: Type, Overall
Rows: Type Columns: OverallA D SA All
IN 3 1 0 4
SC 2 1 4 7
All 5 2 4 11
Pearson Chi-Square = 3.654, DF = 2 Likelihood Ratio Chi-Square = 4.918, DF = 2

Tabulated statistics: NoLSENsG, Overall
Rows: NoLSENsG Columns: OverallA D SA All
1-10 4 2 2 8
11-20 1 0 0 1
21&ab 0 0 2 2
All 5 2 4 11
Pearson Chi-Square = 5.225, DF = 4 Likelihood Ratio Chi-Square = 6.161, DF = 4

Tabulated statistics: TotalG, Overall
Rows: TotalG Columns: OverallA D SA All
1-20 1 1 0 2
21-40 2 02 4
41-60 1 12 4
61&ab 1 0 0 1
All 5 2 4 11

Pearson Chi-Square = 4.675, DF = 6 Likelihood Ratio Chi-Square = 6.161, DF = 6

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Appendix E

Statistical Results using Minitab Software for Don Vicente Rama Memorial ElementarySchool

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Descriptive Statistics: Age, Years, NoLSENs, Total

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Age	6	0	41.00	3.00	7.35	29.00	33.50	44.50	46.25	47.00
Years	6	0	9.83	3.18	7.78	1.00	3.25	9.50	16.25	20.00
NoLSENs	6	0	10.17	2.24	5.49	1.00	6.25	10.50	14.75	17.00
Total	6	0	68.3	21.7	53.1	20.0	27.5	50.0	115.0	160.0

Tally for Discrete Variables: AgeG, Gender, CvlStat, EducAtt, YearsG, Type

AgeG	Count	Percent	Gender	Count	Percent	CvlStat	Count	Percent
21-29	1	16.67	Female	4	66.67	Married	6	100.00
30-39	1	16.67	Male	2	33.33	N=	6	
40-49	4	66.67	N=	6				
N=	6							

EducAtt	Count	Percent	YearsG	Count	Percent	Type	Count	Percent
DL	2	33.33	1-10	3	50.00	IN	1	16.67
ML	4	66.67	11-20	3	50.00	SC	5	83.33
N=	6		N=	6		N=	6	

Tally for Discrete Variables: ID, ASD, HI

ID	Count	Percent	ASD	Count	Percent	HI	Count	Percent
1	3	100.00	1	1	100.00	1	2	100.00
N=	3		N=	1		N=	2	
*=	2		*=	5		*=	1	

Tally for Discrete Variables: NoLSENsG, TotalG

NoLSENsG	Count	Percent	TotalG	Count	Percent
1-10	3	50.00	1-20	1	16.67
11-20	3	50.00	21-40	2	33.33
N=	6		41-60	1	16.67
			61&ab	2	33.33
			N=	6	

Descriptive Statistics: A1, A2, A3, A4, A5, A6, A7, B1, ...

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3
A1	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
A2	6	0	2.833	0.307	0.753	2.000	2.000	3.000	3.250
A3	6	0	3.0000	0.000000	0.000000	3.0000	3.0000	3.0000	3.0000
A4	6	0	2.667	0.333	0.816	2.000	2.000	2.500	3.250
A5	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
A6	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
A7	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
B1	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
B2	6	0	3.333	0.211	0.516	3.000	3.000	3.000	4.000
B3	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
B4	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
B5	6	0	3.0000	0.000000	0.000000	3.0000	3.0000	3.0000	3.0000
B6	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
B7	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C1	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C2	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C3	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C4	6	0	3.333	0.211	0.516	3.000	3.000	3.000	4.000
C5	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C6	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
C7	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
D1	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
D2	6	0	3.333	0.211	0.516	3.000	3.000	3.000	4.000
D3	6	0	3.333	0.211	0.516	3.000	3.000	3.000	4.000
D4	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
D5	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
D6	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
D7	6	0	3.0000	0.000000	0.000000	3.0000	3.0000	3.0000	3.0000
E1	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
E2	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
E3	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
E4	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
E5	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
E6	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
E7	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
F1	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
F2	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
F3	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
F4	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
F5	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250

F6	6	0	3.000	0.258	0.632	2.000	2.750	3.000	3.250
F7	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G1	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G2	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G3	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G4	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G5	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G6	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250
G7	6	0	3.167	0.167	0.408	3.000	3.000	3.000	3.250

Tally for Discrete Variables: Ch3, Ch6, Ch7, Ch8, Ch9, Ch11, Ch12, Ch14

Ch3	Count	Percent	Ch6	Count	Percent	Ch7	Count	Percent
1	4	100.00	1	2	100.00			
			5	4	100.00			
N=	4		N=	2		N=	5	
*=	1		*=	1		*=	1	

Ch8	Count	Percent	Ch9	Count	Percent	Ch11	Count	Percent
1	3	100.00	1	4	100.00	1	1	100.00
N=	3		N=	4		N=	1	
*=	3		*=	2		*=	3	

Ch12	Count	Percent	Ch14	Count	Percent
1	1	100.00	12	6	100.00
N=	1		N=	2	
*=	2		*=	1	

Tabulated statistics: AgeG, Overall

Rows: AgeG Columns: OverallA SA All

21-29	0	1	1
30-39	1	0	1
40-49	3	1	4
All	4	2	6

Pearson Chi-Square = 2.625, DF = 2 Likelihood Ratio Chi-Square = 3.139, DF = 2

Tabulated statistics: Gender, Overall

Rows: Gender Columns: Overall

A	SA	All	
Female	2	2	4
Male	2	0	2
All	4	2	6

Pearson Chi-Square = 1.500, DF = 1 Likelihood Ratio Chi-Square = 2.093, DF = 1

Tabulated statistics: EducAtt, Overall

Rows: EducAtt Columns: OverallA SA All

DL	1	1	2
ML	3	1	4
All	4	2	6

Pearson Chi-Square = 0.375, DF = 1 Likelihood Ratio Chi-Square = 0.367, DF = 1

Tabulated statistics: YearsG, Overall
Rows: YearsG Columns: OverallA SA All
1-10 2 1 3
11-20 2 1 3
All 4 2 6
Pearson Chi-Square = 0.000, DF = 1, P-Value = 1.000 Likelihood Ratio Chi-Square = 0.000, DF = 1, P-Value = 1.000

Tabulated statistics: Type, Overall
Rows: Type Columns: OverallA SA All
IN 1 0 1
SC 3 2 5
All 4 2 6

Pearson Chi-Square = 0.600, DF = 1
Likelihood Ratio Chi-Square = 0.908, DF = 1

Tabulated statistics: NoLSENsG, Overall
Rows: NoLSENsG Columns: OverallA SA All
1-10 3 0 3
11-20 1 2 3
All 4 2 6
Pearson Chi-Square = 3.000, DF = 1, P-Value = 0.083 Likelihood Ratio Chi-Square = 3.819, DF = 1, P-Value = 0.051

Tabulated statistics: TotalG, Overall
Rows: TotalG Columns: OverallA SA All
1-20 1 0 1
21-40 20 2
41-60 01 1
61&ab 1 1 2
All 4 2 6

Pearson Chi-Square = 3.750, DF = 3 Likelihood Ratio Chi-Square = 4.866, DF = 3

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Appendix F

Statistical Results using Minitab Software for Mandaue City Central Special EducationSchool

10/09/2022 9:06:54 AM

Descriptive Statistics: Age, Years, NoLSENs, Total

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Age	21	0	37.05	1.94	8.88	25.00	30.00	34.00	44.00	55.00
Years	21	0	8.24	1.31	6.00	1.00	3.50	7.00	12.00	20.00
NoLSENs	21	0	16.43	1.91	8.76	3.00	10.00	15.00	20.00	36.00
Total	21	0	137.1	17.1	78.2	10.0	40.0	200.0	200.0	200.0

Tally for Discrete Variables: AgeG, Gender, CvlStat, EducAtt, YearsG, Type

AgeG	Count	Percent	Gender	Count	Percent	CvlStat	Count	Percent
21-29	4	19.05	Female	19	90.48	Married	13	61.90
30-39	9	42.86	Male	2	9.52	Sep	1	4.76
40-49	6	28.57	N=	21		Single	6	28.57
50-59	2	9.52				Widow	1	4.76
N=	21					N=	21	

EducAtt	Count	Percent	YearsG	Count	Percent	Type	Count	Percent
CG	4	19.05	1-10	14	66.67	IN	8	38.10
DL	2	9.52	11-20	7	33.33	SC	13	61.90
MG	4	19.05	N=	21		N=	21	
ML	11	52.38						
N=	21							

Tally for Discrete Variables: ID, ASD, SLD, EBD, OD, HI, VI, GT

ID	Count	Percent	ASD	Count	Percent	SLD	Count	Percent
1	12	100.00	1	8	100.00	1	4	100.00
N=	12		N=	8		N=	4	
*=	9		*=	9		*=	6	

EBD	Count	Percent	OD	Count	Percent	HI	Count	Percent
1	5	100.00	1	10	100.00	1	6	100.00
N=	5		N=	6		N=	10	
*=	5		*=	11		*=	11	

VI	Count	Percent	GT	Count	Percent
1	6	100.00	1	7	100.00
N=	6		N=	7	
*=	14		*=	6	

Tally for Discrete Variables: NoLSENsG, TotalG

NoLSENsG	Count	Percent	TotalG	Count	Percent
1-10	7	33.33	1-20	2	9.52
11-20	10	47.62	21-40	5	23.81
21&ab	4	19.05	61&ab	14	66.67
N=	21		N=	21	

Descriptive Statistics: A1, A2, A3, A4, A5, A6, A7, B1, ...

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3
A1	21	0	3.476	0.112	0.512	3.000	3.000	3.000	4.000
A2	21	0	3.143	0.104	0.478	2.000	3.000	3.000	3.000
A3	21	0	3.476	0.112	0.512	3.000	3.000	3.000	4.000
A4	21	0	3.238	0.118	0.539	2.000	3.000	3.000	4.000
A5	21	0	3.286	0.122	0.561	2.000	3.000	3.000	4.000
A6	21	0	3.524	0.112	0.512	3.000	3.000	4.000	4.000
A7	21	0	3.429	0.130	0.598	2.000	3.000	3.000	4.000
B1	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
B2B3	21	0	3.2381	0.0952	0.4364	3.0000	3.0000	3.000	0 3.5000
	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
B4	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
B5	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
B6	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
B7	21	0	3.429	0.111	0.507	3.000	3.000	3.000	4.000
C1	21	0	3.2381	0.0952	0.4364	3.0000	3.0000	3.0000	3.5000
C2	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
C3	21	0	3.1905	0.0878	0.4024	3.0000	3.0000	3.0000	3.0000
C4	21	0	3.429	0.111	0.507	3.000	3.000	3.000	4.000
C5	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
C6	21	0	3.1429	0.0782	0.3586	3.0000	3.0000	3.0000	3.0000
C7	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
D1	21	0	3.429	0.111	0.507	3.000	3.000	3.000	4.000
D2	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
D3	21	0	3.2381	0.0952	0.4364	3.0000	3.0000	3.0000	3.5000
D4	21	0	3.2381	0.0952	0.4364	3.0000	3.0000	3.0000	3.5000
D5	21	0	3.2381	0.0952	0.4364	3.0000	3.0000	3.0000	3.5000
D6	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
D7	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
E1	21	0	3.429	0.111	0.507	3.000	3.000	3.000	4.000
E2	21	0	3.381	0.109	0.498	3.000	3.000	3.000	4.000
E3	21	0	3.381	0.129	0.590	2.000	3.000	3.000	4.000
E4	21	0	3.286	0.122	0.561	2.000	3.000	3.000	4.000
E5	21	0	3.381	0.109	0.498	3.000	3.000	3.000	4.000
E6	21	0	3.333	0.126	0.577	2.000	3.000	3.000	4.000
E7	21	0	3.333	0.126	0.577	2.000	3.000	3.000	4.000
F1	21	0	3.381	0.109	0.498	3.000	3.000	3.000	4.000
F2	21	0	3.429	0.111	0.507	3.000	3.000	3.000	4.000
F3	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
F4	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000
F5	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
F6	21	0	3.286	0.101	0.463	3.000	3.000	3.000	4.000
F7	21	0	3.333	0.105	0.483	3.000	3.000	3.000	4.000

G1	21	03.286	0.122	0.561	2.000	3.000	3.000	4.000
G2	21	03.429	0.111	0.507	3.000	3.000	3.000	4.000
G3	21	03.429	0.111	0.507	3.000	3.000	3.000	4.000
G4	21	03.429	0.111	0.507	3.000	3.000	3.000	4.000
G5	21	03.286	0.122	0.561	2.000	3.000	3.000	4.000
G6	21	03.286	0.101	0.463	3.000	3.000	3.000	4.000
G7	21	03.333	0.105	0.483	3.000	3.000	3.000	4.000

Tally for Discrete Variables: Ch1, Ch2, Ch3, Ch4, Ch5, Ch6, Ch8, Ch10, ...

Ch1 Count Percent Ch2 Count Percent Ch3 Count Percent1 7 100.00 1 10 100.00 1 8 88.89

N= 7 N= 10 3 1 11.11

*= 13 *= 11 N= 9

*= 11

Ch4 Count Percent Ch5 Count Percent Ch6 Count Percent

1 1 100.00 13 100.00 1 5 100.00

N= 1 N=3 N= 5

*= 9 *= 7 *= 15

Ch8 Count Percent Ch10 Count Percent Ch11 Count Percent1 4 100.00 1 1 100.00 1 16 94.12

N= 4 N= 1 11 1 5.88

*= 9 *= 8 N= 17

*= 3

Ch12 Count Percent Ch13 Count Percent Ch14 Count Percent

1 5 100.00 113 100.00 1 6 100.00

N= 5 N=13 N= 6

*= 9 *= 6 *= 13

Ch15 Count Percent1 10 100.00

N= 10

*= 9

Tabulated statistics: AgeG, Overall

Rows: AgeG Columns: OverallA SA All

21-29	2	2	4
30-39	4	5	9
40-49	5	1	6
50-59	0	2	2
All	11	10	21

Pearson Chi-Square = 4.741, DF = 3 Likelihood Ratio Chi-Square = 5.747, DF = 3

Tabulated statistics: Gender, Overall

Rows: Gender Columns: OverallA SA All

Female	11	8	19
Male	0	2	2
All	11	10	21

Pearson Chi-Square = 2.432, DF = 1 Likelihood Ratio Chi-Square = 3.201, DF = 1

Tabulated statistics: CvlStat, Overall
Rows: CvlStat Columns: OverallA SA All
Married 8 5 13
Sep 1 0 1
Single 2 4 6
Widow 0 1 1
All 11 10 21
Pearson Chi-Square = 3.319, DF = 3
Likelihood Ratio Chi-Square = 4.103, DF = 3

Tabulated statistics: EducAtt, Overall
Rows: EducAtt Columns: OverallA SA All
CG 1 3 4
DL 0 2 2
MG 1 3 4
ML 9 2 11
All 11 10 21
Pearson Chi-Square = 8.426, DF = 3 Likelihood Ratio Chi-Square = 9.636, DF = 3

Tabulated statistics: YearsG, Overall
Rows: YearsG Columns: OverallA SA All
1-10 6 8 14
11-20 5 2 7
All 11 10 21
Pearson Chi-Square = 1.527, DF = 1, P-Value = 0.217 Likelihood Ratio Chi-Square = 1.567, DF = 1, P-Value = 0.211

Tabulated statistics: Type, Overall
Rows: Type Columns: OverallA SA All
IN 4 4 8
SC 7 6 13
All 11 10 21
Pearson Chi-Square = 0.029, DF = 1, P-Value = 0.864 Likelihood Ratio Chi-Square = 0.029, DF = 1, P-Value = 0.864

Tabulated statistics: NoLSENsG, Overall
Rows: NoLSENsG Columns: Overall
A SA All
1-10 5 2 7
11-20 4 6 10
21&ab 2 2 4
All 11 10 21
Pearson Chi-Square = 1.642, DF = 2, P-Value = 0.440 Likelihood Ratio Chi-Square = 1.683, DF = 2, P-Value = 0.431

Tabulated statistics: TotalG, Overall
Rows: TotalG Columns: OverallA SA All
1-20 1 1 2
21-40 5 0 5
61&ab 5 9 14
All 11 10 21
Pearson Chi-Square = 6.109, DF = 2 Likelihood Ratio Chi-Square = 8.043, DF = 2

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Appendix G
Overall Statistical Results using Minitab Software

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Descriptive Statistics: Age, Years, NoLSENs, Total

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
Age	38	0	40.13	1.48	9.10	25.00	32.75	39.50	48.25	55.00
Years	38	0	10.53	1.13	6.97	1.00	4.00	9.50	17.25	26.00
NoLSENs	38	0	13.76	1.32	8.16	1.00	9.00	11.50	17.25	36.00
Total	38	0	98.5	12.3	75.7	10.0	40.0	51.0	200.0	200.0

Tally for Discrete Variables: AgeG, Gender, CvlStat, EducAtt, YearsG, Type

AgeG	Count	Percent	Gender	Count	Percent	CvlStat	Count	Percent
21-29	5	13.16	Female	30	78.95	Married	27	71.05
30-39	14	36.84	Male	8	21.05	Sep	1	2.63
40-49	12	31.58	N=	38		Single	9	23.68
50-59	7	18.42				Widow	1	2.63
N=	38					N=	38	

EducAtt	Count	Percent	YearsG	Count	Percent	Type	Count	Percent
CG	5	13.16	1-10	21	55.26	IN	13	34.21
DL	4	10.53	11-20	15	39.47	SC	25	65.79
MG	5	13.16	21-30	2	5.26	N=	38	
ML	24	63.16	N=	38				
N=	38							

Tally for Discrete Variables: ID, ASD, SLD, EBD, OD, HI, VI, GT, Others

ID	Count	Percent	ASD	Count	Percent	SLD	Count	Percent	1	19	100.00	1	12
100.00	1		4	100.00									
N=	19		N=	12		N=	4						
*=	18		*=	26		*=	17						

EBD	Count	Percent	OD	Count	Percent	HI	Count	Percent
1	6	100.00	1	9	100.00	1	16	100.00
N=	6		N=	9		N=	16	
*=	15		*=	19		*=	19	

VI Count Percent GT Count Percent Others Count Percent1 8 100.00 1 7
100.00 1 1 100.00
N= 8 N= 7 N= 1
*= 23 *= 17

Tally for Discrete Variables: NoLSENsG, TotalG

NoLSENsG Count Percent TotalG Count Percent1-10 18 47.37 1-20 5 13.16
11-20 1436.84 21-40 11 28.95
21&ab 615.79 41-60 5 13.16
N= 38 61&ab 17 44.74
N= 38

Descriptive Statistics: A1, A2, A3, A4, A5, A6, A7, B1, ...

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3
A1	38	0	3.316	0.101	0.620	2.000	3.000	3.000	4.000
A2	38	0	3.026	0.103	0.636	2.000	3.000	3.000	3.000
A3	38	0	3.237	0.103	0.634	2.000	3.000	3.000	4.000
A4	38	0	3.000	0.119	0.735	1.000	3.000	3.000	3.250
A5	38	0	3.079	0.127	0.784	1.000	3.000	3.000	4.000
A6	38	0	3.289	0.106	0.654	2.000	3.000	3.000	4.000
A7	38	0	3.158	0.133	0.823	1.000	3.000	3.000	4.000
B1	38	0	3.3158	0.0764	0.47113.0000	3.0000	3.0000	4.0000	
B2	38	0	3.2895	0.0746	0.45963.0000	3.0000	3.0000	4.0000	
B3	38	0	3.2632	0.0724	0.44633.0000	3.0000	3.0000	4.0000	
B4	38	0	3.3158	0.0764	0.47113.0000	3.0000	3.0000	4.0000	
B5	38	0	3.2632	0.0724	0.44633.0000	3.0000	3.0000	4.0000	
B6	38	0	3.2895	0.0746	0.45963.0000	3.0000	3.0000	4.0000	
B7	38	0	3.3158	0.0764	0.47113.0000	3.0000	3.0000	4.0000	
C1	38	0	3.2632	0.0724	0.44633.0000	3.0000	3.0000	4.0000	
C2	38	0	3.2895	0.0746	0.45963.0000	3.0000	3.0000	4.0000	
C3	38	0	3.2368	0.0699	0.43093.0000	3.0000	3.0000	3.2500	
C4	38	0	3.4737	0.0821	0.50603.0000	3.0000	3.0000	4.0000	
C5	38	0	3.2895	0.0836	0.51512.0000	3.0000	3.0000	4.0000	
C6	38	0	3.1842	0.0637	0.39293.0000	3.0000	3.0000	3.0000	
C7	38	0	3.3158	0.0764	0.47113.0000	3.0000	3.0000	4.0000	
D1	38	0	3.3684	0.0878	0.54132.0000	3.0000	3.0000	4.0000	
D2	38	0	3.2895	0.0917	0.56512.0000	3.0000	3.0000	4.0000	
D3	38	0	3.2895	0.0746	0.45963.0000	3.0000	3.0000	4.0000	
D4	38	0	3.2105	0.0769	0.47412.0000	3.0000	3.0000	3.2500	
D5	38	0	3.2632	0.0724	0.44633.0000	3.0000	3.0000	4.0000	
D6	38	0	3.26320.0899	0.5543	2.0000	3.0000	3.0000	4.0000	
D7	38	0	3.28950.0746	0.4596	3.0000	3.0000	3.0000	4.0000	

E1	38	03.237	0.110	0.675	2.000	3.000	3.000	4.000
E2	38	03.211	0.108	0.664	2.000	3.000	3.000	4.000
E3	38	03.211	0.108	0.664	2.000	3.000	3.000	4.000
E4	38	03.1579	0.0964	0.5939	2.0000	3.0000	3.0000	4.0000
E5	38	03.211	0.101	0.622	2.000	3.000	3.000	4.000
E6	38	03.158	0.110	0.679	2.000	3.000	3.000	4.000
E7	38	03.184	0.106	0.652	2.000	3.000	3.000	4.000
F1	38	03.2368	0.0957	0.5897	2.0000	3.0000	3.0000	4.0000
F2	38	03.2632	0.0975	0.6011	2.0000	3.0000	3.0000	4.0000
F3	38	03.1579	0.0887	0.5466	2.0000	3.0000	3.0000	3.2500
F4	38	03.2368	0.0957	0.5897	2.0000	3.0000	3.0000	4.0000
F5	38	03.132	0.101	0.623	2.000	3.000	3.000	4.000
F6	38	03.1579	0.0964	0.5939	2.0000	3.0000	3.0000	4.0000
F7	38	03.132	0.101	0.623	2.000	3.000	3.000	4.000
G1	38	0	3.1579	0.0964	0.5939	2.0000	3.0000	3.0000	4.0000
G2	38	03.211	0.101	0.622	2.000	3.000	3.000	4.000
G3	38	03.237	0.103	0.634	2.000	3.000	3.000	4.000
G4	38	0	3.2368	0.0957	0.5897	2.0000	3.0000	3.0000	4.0000
G5	38	03.132	0.101	0.623	2.000	3.000	3.000	4.000
G6	38	0	3.1316	0.0937	0.5776	2.0000	3.0000	3.0000	3.2500
G7	38	0	3.1842	0.0913	0.5626	2.0000	3.0000	3.0000	4.0000

Tally for Discrete Variables: Ch1, Ch2, Ch3, Ch4, Ch5, Ch6, Ch7, Ch8, ...

Ch1 Count Percent Ch2 Count Percent Ch3 Count Percent
1 13 100.00 1 14 100.00 1 1894.74
N= 13 N= 14 3 1 5.26
*= 18 *= 18 N= 19
*= 18

Ch4 Count Percent Ch5 Count Percent Ch6 Count Percent
1 2 100.00 1 5100.00 1 10 100.00
N= 2 N= 5 N= 10
*= 19 *= 16 *= 25

Ch7 Count Percent Ch8 Count Percent Ch9 Count Percent
1 5 100.00 1 10 100.00 1 4 100.00
N= 5 N= 10 N= 4
*= 33 *= 28 *= 34

Ch10 Count Percent Ch11 Count Percent Ch12 Count Percent
1 2 100.00 1 26 96.30 1 8 100.00
N= 2 11 1 3.70 N= 8
*= 18 N= 27 *= 27
*= 9

Ch13 Count Percent Ch14 Count Percent Ch15 Count Percent1 22 100.00 1
12 100.00 1 16 100.00
N= 22 N= 12 N= 16
*= 8 *= 23 *= 14

Tabulated statistics: AgeG, Overall
Rows: AgeG Columns: OverallA D SA All
21-29 2 0 3 5
30-39 8 0 6 14
40-49 8 1 3 12
50-59 2 1 4 7
All 20 2 16 38
Pearson Chi-Square = 5.314, DF = 6 Likelihood Ratio Chi-Square = 6.125, DF = 6

Tabulated statistics: Gender, Overall
Rows: Gender Columns: OverallA D SA All
Female 16 2 12 30
Male 4 0 4 8
All 20 2 16 38
Pearson Chi-Square = 0.697, DF = 2 Likelihood Ratio Chi-Square = 1.103, DF = 2

Tabulated statistics: CvlStat, Overall
Rows: CvlStat Columns: OverallA D SA All
Married 16 1 10 27
Sep 1 0 0 1
Single 3 1 5 9
Widow 0 0 1 1
All 20 2 16 38
Pearson Chi-Square = 4.398, DF = 6 Likelihood Ratio Chi-Square = 5.067, DF = 6

Tabulated statistics: EducAtt, Overall
Rows: EducAtt Columns: OverallA D SA All
CG 2 0 3 5
DL 1 0 3 4
MG 1 0 4 5
ML 16 2 6 24
All 20 2 16 38
Pearson Chi-Square = 8.590, DF = 6 Likelihood Ratio Chi-Square = 9.349, DF = 6

Tabulated statistics: YearsG, Overall
Rows: YearsG Columns: OverallA D SA All
1-10 11 0 10 21
11-20 9 2 4 15
21-30 0 0 2 2
All 20 2 16 38
Pearson Chi-Square = 6.867, DF = 4 Likelihood Ratio Chi-Square = 8.239, DF = 4

Tabulated statistics: Type, Overall
Rows: Type Columns: OverallA D SA All

IN	8	1	4	13
SC	12	1	12	25
All	20	2	16	38

Pearson Chi-Square = 1.122, DF = 2 Likelihood Ratio Chi-Square = 1.136, DF = 2

Tabulated statistics: NoLSENsG, Overall
Rows: NoLSENsG Columns: OverallA D SA All

1-10	12	2	4	18
11-20	6	0	8	14
21&ab	2	0	4	6
All	20	2	16	38

Pearson Chi-Square = 6.876, DF = 4 Likelihood Ratio Chi-Square = 7.820, DF = 4

Tabulated statistics: TotalG, Overall
Rows: TotalG Columns: OverallA D SA All

1-20	3	1	1	5
21-40	9	0	2	11
41-60	1	1	3	5
61&ab	7	0	10	17
All	20	2	16	38

Pearson Chi-Square = 12.452, DF = 6 Likelihood Ratio Chi-Square = 12.661, DF = 6

Prepared by:

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

CURRICULUM VITAE

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A. Personal Information

Name	:	Precy N. Alarba			
Date of Birth	:	October 2, 1997			
Place of Birth	:	Baod, Bantayan , CebuCitizenship	:	Filipino	
Gender	:	Female			
Marital Status	:	Single			
Address	:	Tamiao, Bantayan, CebuFather	:	Pedro M. Alarba	
Mother	:	Hermenia N. Alarba			

B. Academic Background

POST GRADUATE	Master of Arts of Education Major Special EducationCebu Technological University - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City2022 Diploma in Education Major in Special EducationCebu Technological University - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City 2022
TERTIARY LEVEL	Bachelor of Elementary Education -SPED/TLE Cebu Technological University- Main Campus 2015 – 2019 M.J Cuenco Ave. R. Palma St. Cebu City
HIGH SCHOOL	Bantayan National High SchoolBantayan Cebu 2010 – 2014
ELEMENTARY	Tamiao Elementary SchoolBantayan Cebu 2004-2010

C. Professional Career Eligibility

Licensure Examination for TeachersBEED
September 2019

D. Work Experience

Part-time Instructor
Cebu Technological University-College of EducationCebu City
October 2019 - Present
Kinder 1 Private School TeacherSta. Cruz Learning Center Liloan, Cebu
June 2019 - October 2019
Sign Language Interpreter
Massage Therapist of Mother's TouchCebu City
October 2018- May 2019

E. Seminars Attended and Trainings

Sign Language Class Teacher
Cebu City Public Library and Information CenterJuly 6 - September 14, 2019
Sign Language Refresher CourseLink Center for the Deaf September 24 - 28, 2018
National Certificate II in Hilot (Welness Massage) Technical Education and Skills Development AuthorityJuly 2 - August 2, 2018
Filipino Sign Language Level 4
City Social Welfare Services with Office of Differently-Abled Persons Affairs incoordination with Mandaue CIty Federation of the Deaf
January 28 - July 15, 2018
DUsking Leadership Training in Japan
City Social Welfare Services with Office of Differently-Abled Persons Affairs incoordination with Mandaue City Federation of the Deaf
September 24, 2017
Special Education Congress and OlympicsSpecial Education Students Organization July 27, 2017

Advance Braille for Teaching Vision Impairment
City Social Welfare Services with Office of Differently-Abled Persons Affairs in coordinationwith Mandaue City Federation of the Deaf
January 22 - June 4, 2017

CURRICULUM VITAE

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Guinabsan Basak San Nicolas, Cebu CityMobile Number: 09474942505 mylen.gador@deped.gov.ph

A. Personal Information

NAME	:	Mylen B. Gador DATE OF BIRTH:		December 16, 1996
PLACE OF BIRTH	:	Lapu-Lapu City, CebuCITIZENSHIP:		Filipino
GENDER	:	FemaleMARITAL STATUS	:	Single
ADDRESS	:	Basak San Nicolas, Cebu City		
FATHER	:	Orlando A. Gador		
MOTHER	:	Melinda B. Gador		

B. Academic Background

POST GRADUATE	Master of Arts in Education Major in Special EducationCebu Technological University - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City2022
	Diploma in Education Major in Special EducationCebu Technological University - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City 2019
TERTIARY LEVEL	Bachelor of Elementary Education Major in Special EducationCebu Normal University - Main Campus Osmeña Blvd, Cebu City, 6000 Cebu 2013-2017
HIGH SCHOOL	Cebu City Don Carlos A. Gothong Memorial National High School C. Padilla St., Cebu City2009 – 2013
ELEMENTARY	Mambaling Elementary School N. Bacalso St., Cebu City2003-2009

C. Professional Career Eligibity

Licensure Examination for TeachersBEED
September 2019

D. Work Experience

Public School Teacher
Don Vicente Rama Memorial Elementray SchoolMacopa St. Basak San Nicolas, Cebu City November 2022-present

Primary Teacher Kiddiehaus of LearningBrgy. Parian, Cebu CityApril 2017-May 2022

E. Seminars Attended and Trainings

In-service Training
Don Vicente Rama Memorial Elementary SchoolJanuary 3-7. 2021

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue XI Nov 2023- Available at www.ijraset.com

CURRICULUM VITAE

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Email: lugoag.cnu.edu.ph

A. *Personal Background*

Name	:	Angelo Grafe Lugo
Date of Birth	:	September 25,1998
Place of Birth	:	Cebu City
Citizenship	:	FilipinoMarital Status : Single
Address	:	Purok 1 Sto. Nino, Basac Loon Bohol
Father	:	Nino Zuasola Lugo
Mother	:	Liezel Grafe Lugo

B. *Academic Background*

POST GRADUATE	Master of Arts in Education Major in Special Education CEBU TECHNOLOGICAL UNIVERSITY- Main Campus M.J Cuenco Ave. R. Palma St. Cebu City2022 Diploma in Education Major in Special EducationCebu Technological University - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City 2019
TERTIARY LEVEL	Bachelor of Elementary Education – SpEd /TLE CEBU TECHNOLOGICAL UNIVERSITY - Main Campus M.J Cuenco Ave. R. Palma St. Cebu City2018-2019
HIGH SCHOOL	SACRED HEART ACADEMY Moto Sur, Loon Bohol2014-2015
ELEMENTARY	TALAMBAN ELEMENTARY SCHOOL Talamban Cebu City2012-2013

C. *Professional Career Eligibility*

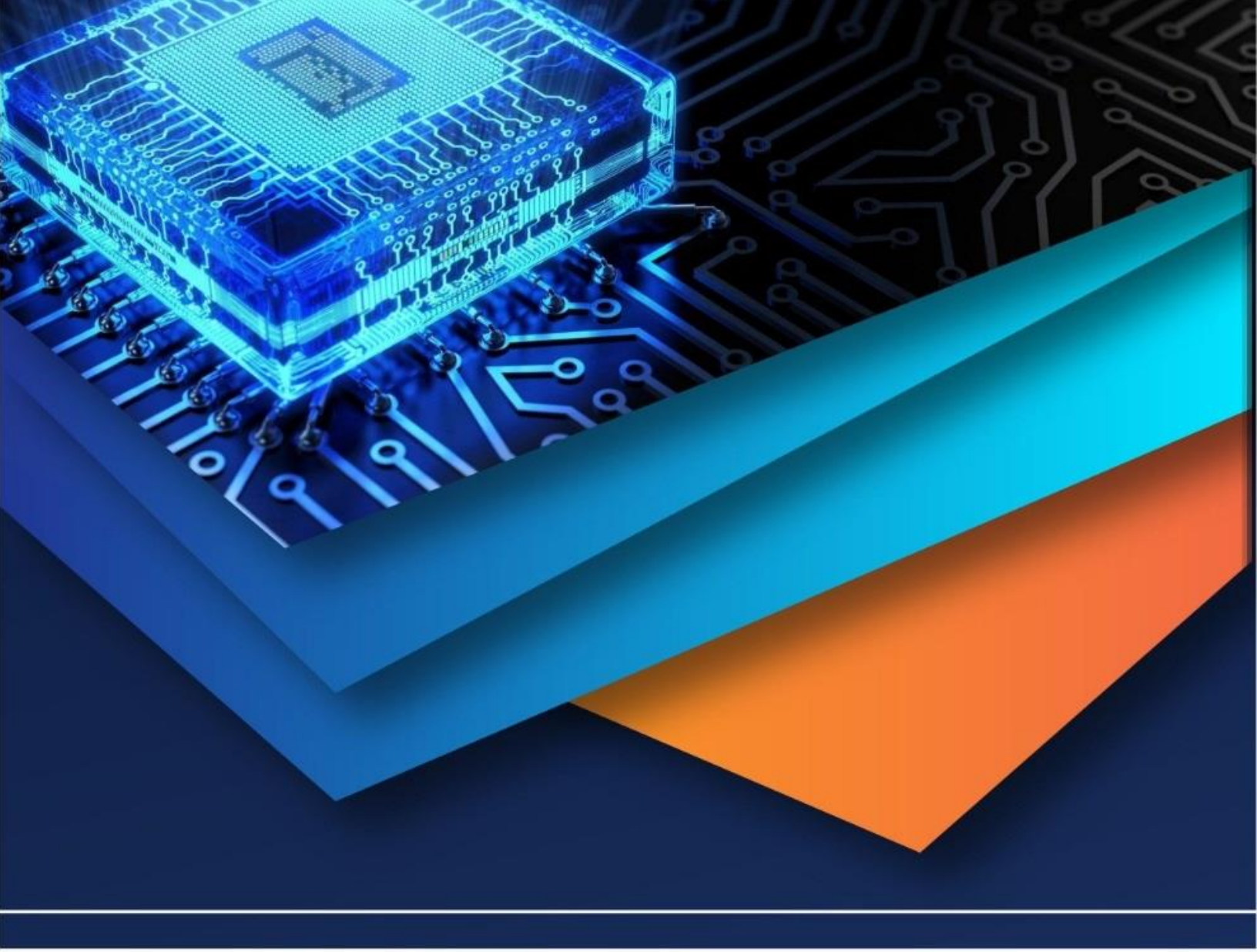
Licensure Examination for Professional TeachersBEED
March 2022

D. *Work Experience*

Cebu Normal University- Main CampusOsmeña Blvd, Cebu City, 6000 Cebu Position- College Instructor
August 08,2022 to Present
EXL Service Philippines
10th Floor 2Quad Building Cardinal Rosales Ave. Corner Sumilon St. Cube Business Park, CebuCity
Account: CNO Financial Position: Process ExecutiveJanuary 24,2022- Present
Part Time Job: Virtual Shadow TeacherAugust 2020 to Present
Sykes Asia Inc./ SITEL
Synergis IT Center, F. Cabahug St, Cebu City, 6000 CebuAccount: Ally Financial
Position: Customer Service RepresentativeAugust 17, 2020 - January 22, 2022
Kiddiehaus of Learning Inc.
1-B Sikatuna St. Barangay Pari-an Cebu CityMay. 21, 2019 – March 20, 2020
Position: Elementary Teacher
Golden Arches. Development Corp. McDonald's JCentre Mall Branch
A.S Fortuna St. Bakilid Mandaue CityAugust 04, 2015 – January 30, 2019
Position: Local Store Marketing Representative

E. *Seminars And Training Attended*

1) Identifying and Teaching Learners with Special Educational Needs in InclusiveClassrooms (2022)
2) 50th National and 11th International PAFTE Convention (2021)
3) The ABC's of INCLUSIVE EDUCATION (2021)
4) REX PUBLISHING INC. Edukampyon Series, "Going Full Circle: Integrating HolisticValues Formation in Home Based Lessons" (2020)
5) Blood Donation Awareness Seminar (2019)
6) Fire Prevention Seminar (2019)
7) McDonalds Philippines: Public Speaking and Hosting Training and Seminar (2018)
8) Level 1 Filipino Sign Language (2017)



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IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY