HEI Teachers' Technology Integration During Pandemic: Evidence from a Local College

Mark Joren A. Caberos
Faculty, Gov. Alfonso D. Tan College, Tangub City

***Abstract*—** This qualitative-phenomenological research study aims to explore teachers' lived experiences in technology integration in teaching in a local college during pandemic. It explains their views, challenges encountered, coping mechanisms, learnings, and experiences. The data were gathered through in-depth interviews with the ten HEI teachers as research participants. Using Moustaka's phenomenological approach, five themes emerged, namely: facilitating distance teaching and learning, making classes motivating and engaging, allowing access to vast and limitless sources of information, experiencing difficulty adapting to technology, and having a positive attitude towards technology integration. It is recommended that GADTC's college administrators continue to conduct faculty development activities to help their teachers harness their technological knowledge and capabilities. The activities may focus on making instructional technology more effectively to help students become lifelong learners by shifting their behavior from passive to active social learners.

***Keywords*—** Lived Experiences, Local College, Pandemic, Phenomenology, Technology Utilization.

I. INTRODUCTION

The global pandemic has undeniably brought difficulties to different sectors, including educational institutions that are compelled to shift from traditional face-to-face classroom modalities to flexible, blended, full-online, or distance learning. Lectures, oral and written student performances, experiments, and other classroom learning activities are now computer-generated. Due to the adoption of new educational modes, lesson delivery, and other onsite activities are now dependent on technology. With this, teachers can benefit from technology in the classroom by employing it as a source of engagement, enhancement, and extension.

Educational technology is a means of improving learning using educational tools, software, and electronic media. It requires deciding on and organizing the various tools and available resources to aid understanding. It also necessitates selecting technology that meets the learning needs of students as well as teachers' ability to adapt it to specific learning activities (Okojie et al., 2006).

In these critical circumstances brought by the pandemic, technology integration aids teachers in teaching students to learn. However, knowing how to use technology is not enough for teachers to succeed during this pandemic; they also need to understand the pedagogy that underpins it. This means that teachers should not only use computers, software tools, and applications, digital media, and videos, among others, but also connect these instructional technologies to the learning objectives, methods of instruction, learning styles and pace of learning, assessment, and evaluation strategies, including follow-up procedures. Teachers may not require extensive training to use technology for communication but integrating it into the classroom is a complex and challenging task, especially in the online learning setup.

This abrupt change to online learning has left teachers grasping for technical expertise due to a lack of training and resources. Due to the different tasks that teachers have to perform, they do not have ample time to practice the new and ever-changing technology. According to the studies, numerous factors originating from the teacher or school setting have a significant impact on technology integration, including teachers' thoughts and behaviors, demographic characteristics of teachers, availability and access to computers and resources, and school support structure (Chen, 2008; Van Braak & Valcke, 2004; Vannatta & Fordham, 2004).

Moreover, teachers' ability to use technology in the classroom may be hampered if they lack technical skills, content knowledge, and the capacity to apply pertinent pedagogical ideas. Technology should be considered alongside teaching and learning concerns like developing learning goals, selecting instructional methods, providing feedback, and assessing and evaluating students (Okojie et al., 2006). Teacher skills in content, pedagogy, and technology are required for successful technological integration (Koehler & Mishra, 2005). This perception of technology integration remains a challenge in many educational institutions, including a local college in Tangub City, Gov. Alfonso D. Tan College (GADTC).

The city's local government provided GADTC teachers with learning gadgets and a monthly data allowance for their online classes to assist them in this transition. Also, teachers are required to attend in-house workshops and national and international webinars to develop technological competence. Despite the support given, teachers are still having difficulties managing online courses.

Objectives of the Study

The researcher finds it relevant to explore the teachers' competence and experiences with technology integration in today's learning environment. The researcher believes that finding out the teachers' skills in incorporating technology into the new modality of learning, as well as their experiences, challenges, and recommendations, would greatly help in improving the institution's teaching and learning processes and outcomes. Although there were already studies conducted on technology integration both locally and internationally, there was only a scarce amount of research on higher education teachers' experiences on this topic. Thus, the results and implications of this investigation may contribute to the body of knowledge in this field.

II. METHODS

Research Design

Phenomenological research design was considered the most appropriate for this analysis since it offered a straightforward mechanism to set aside the preconceptions of the researcher about the online learning phenomenon and resulted in a joint review of the phenomenon by the researchers and participants. Streubert and Carpented (1995) defined phenomenological investigation as an investigation designed to uncover the nature and depths of one's experiences. Phenomenology is an effective technique of analysis to discover the experiences of those who have been through the phenomenon (Groenewald, 2004), which in this study applies to the experiences of teachers in higher education as they go through online learning and technology utilization. The goal of the phenomenological analysis is to investigate the online learning phenomenon as encountered by the college teachers.

This design serves as an engine that will fuel the richness, breadth, and depth of the perceptions of higher education instructors of their lived experience. In addition, to allow research participants to share their online learning journey freely, the study employs the questioning style anchored on Creswell (2007).

Research Setting

This study was done at Gov. Alfonso D. Tan College (GADTC), Maloro, Tangub City, Misamis Occidental, Philippines, 7214. Tangub City's Local Government Unit supports GADTC as a local college. Its principal goal is to serve Tangubanons and neighboring cities and towns with accessible, affordable, and high-quality education.

At present, GADTC has seven institutes, namely: the Institute of Business and Financial Services; the Institute of Criminal Justice Education; the Institute of Arts and Sciences; the Institute of Teacher Education; the Institute of Computer Studies; the Institute of Midwifery; and the Institute of Senior High School. The Institute of Business and Financial Services offers two programs, namely: BS in Human Resource Development Management, BS in Marketing Management, and Associate in Office Administration. The Institute of Criminal Justice Education offers a BS in Criminology. The Institute of Arts and Sciences offers the following programs: AB English Language, AB Political Science, and AB Communication. The Institute of Teacher Education offers the following programs: BSEd Mathematics, BSEd English, BSEd Filipino, BSEd Social Studies, and BEEd. The Institute of Computer Studies offers BS in Computer Science, the Institute of Midwifery offers two-year General Midwifery, and lastly, the Institute of Senior High School offers General Academic Track (STEM, ABM, GAS, and HUMMS) and TechVoc Track (Caregiving, Tourism Promotion Services, Computer Programming, and Front Office Services). Gov. Alfonso D. Tan College is a CHED Recognized, TESDA Accredited, and ALCU-COA Accredited institution.

Participants of the Study

The research participants were the ten HEI teachers from Gov. Alfonso D. Tan College who met the inclusion criteria. When managing the data, a coding technique was utilized to keep the participants' identities confidential.

Boyd (2001) also sees two to ten participants as necessary to achieve saturation. Creswell (2007) supports this concept as he suggested that long interviews can be conducted for a phenomenological analysis of up to 10 individuals.

Furthermore, they were chosen as research participants after passing the inclusion criteria set out in this study: 1) they are higher education teachers Gov. Alfonso D. Tan College for the academic year 2021–2022; 2) they have experienced the online learning modality of

teaching; and 3) they have served the school for at least one year.

Research Instruments

Since the study employed phenomenological inquiry and explored greater depth of meaning, the main instruments were the researchers and the ten research participants. Open, semi-structured and individual in-depth interview using researcher-made interview guide questions was used in conducting the investigation. One important beginning step that the researcher has done was to establish initial relationship with the participants. Since the study deals with critical issues, the researcher strives hard to create a friendly, understanding, and an open atmosphere to the participants so that they could feel confident, free, and secured in sharing their experiences (Van Manen, 1990).

Data Collection

Before the questionnaire was administered to the respondents, the researcher asked for consent or permission from the College President, VP for Academic Affairs, and the Institute Deans to conduct the study. Upon approval, the researcher then briefed and provided the respondents with a copy of the informed consent to ensure that they were correctly directed in answering the questions in the questionnaire.

The qualitative data were obtained through semi-structured, open-ended interviews done through online video/audio conference, with follow-up interviews conducted via e-mail or online video/audio conference. The raw data were transcribed and examined when all the interviews were completed.

Data Analysis

Each individual interview was audio recorded, transcribed, and printed. The data was examined using what Moustakas (as cited in Matise, 2015) referred to as horizonalization. This process includes highlighting meaning statements, sentences or quotes provided by the participants about how they experienced the phenomenon, which leads to the themes and eventually understanding the phenomenon being researched in this study (Creswell, 2013).

Furthermore, a reiterative process allows time to process the information, code for themes by identifying important statements and clustering them, write, and reflect on the findings. Applying Moustakas' procedure, the researcher first bracket throughout the study any preconceptions, setting aside assumptions and presuppositions on the phenomenon being studied. This process called Epoche allows the researcher to see in fresh perspective at hand. Thereafter, the eight steps was religiously followed: 1) Horizontalizing; 2) Reducing of experiences; 3) Thematic clustering; 4) Comparing of multiple data sources; 5) Crafting of individual textural descriptions of participants; 6) Constructing of individual structural descriptions; 7) Constructing of composite structural descriptions; and 8) Synthesizing the texture and structure into an expression.

Ethical Considerations

Creswell (2005) emphasized the importance of ethical behavior in research, whether it is in respecting participants, reporting findings fully and honestly, or other concerns. Respect for the dignity of the research participants should be prioritized. Participation in this study was confidential, voluntary, and based on informed consent obtained in writing from all the participants.

The questionnaire and the discussion were kept confidential. The researcher operated transparently by detailing the aim of the study and requirements for participation. In addition, the anonymity of individuals participating in the research was also ensured. Since participating in this research endeavor was voluntary, the respondents could withdraw at any time. And mostly, any communication about the study was done with honesty and transparency.

Seidman (1998) stated that during the study, he advocated the necessity of building a friendship with the respondents to not hold back in expressing their innermost feelings. The researcher's main aim was to give the respondents an understanding of their technology integration and utilization to discover and understand their thoughts, feelings, and insights about the phenomenon.

III. RESULTS AND DISCUSSION

The study used Moustakas' method to explore the experiences of the phenomenon to investigate and analyze the teachers' lived experiences in technology integration in teaching in a local college during pandemic. The study involved ten (10) teacher participants that teaching in a higher education institution on the academic year 2021-2022. These teachers have experienced the online learning modality of teaching and that they have served the school for at least one year. The researcher utilized the inclusion criteria and accounts of the ten (10) participants and analyzed them for important meanings in search of the emergent themes in the presentation of varied experiences of the participants.

Through examining and analyzing the data, there were 70 initial codes, 14 categories, and 5 themes that were developed. The themes that capsulize the teachers' experiences with technology integration are "Facilitating distance teaching and learning," "Making classes motivating and engaging," "Allowing access to vast and limitless sources of information," "Experiencing difficulty adapting with technology," and "Having a positive attitude towards technology integration." Five main themes emerged in the analysis of the data revealing the participants' experiences.

Facilitating distance teaching and learning.

The first theme pertains to the importance of technology in facilitating distance or remote teaching and learning during the pandemic. The teachers recognized that technology makes teaching and learning possible during this challenging time, provides them with opportunities to explore new ways, ideas, and strategies to improve teaching and learning, and gives them and their students convenience in accomplishing their tasks. As they shared:

> *Technology is beneficial, especially now that we are experiencing pandemic. Since in-person classes are not allowed, technology helps me conduct classes remotely. (P1)*

> *I am happy to have used technology in my class. I am so glad that it allows me to explore new ideas or new strategies in teaching. There are a lot of examples and models that I can search for on the web. Aside from that, it pushes me to be innovative in designing activities to get students excited about learning new things in my class discussion. (P7)*

> *With technology, I can avoid doing and preparing things repeatedly, like making instructional materials and checking students' outputs. Instructional materials can easily be stored in the LMS and used in the following semesters. It makes me happy because it makes my life easier. (P6)*

> *Based on my research, one of the teaching principles is to align our class experiences with the lesson objectives. Thus, I use technology to aid me in achieving my learning outcomes. For example, I asked them to use Canva to create an infographic material to summarize the discussion as one of my objectives. (P3)*

> *The things that made me happy in my integration of technology into my teaching are the following: (1) the ability to slowly cope with the new modes, ways, and avenues for learning in this time of pandemic; (2) the chance to explore different online educational platforms and applications for learning; and (3) the time to venture into online education and all its underlying possibilities for improvements. (P8)*

New remote learning environments are proving crucial to facilitating learning, and technology's role has become an integral part of making this possible (Petko, 2021). Instructional delivery, communications, and interactions between the teacher and students and among students continue despite their different geographical locations through the help of electronic gadgets, internet connections, and various technology platforms and tools.

Furthermore, technology enables teachers to be more creative and innovative in their teaching to promote better learning. According to Falloon (2020), there are plenty of resources on the internet. Apart from free and discounted ed-tech tools, the resources also include open digital libraries. These offer students and teachers all over the world free access to a new array of learning materials. She also added that almost all the classroom learning applications that are freely available on the internet allow for personalized learning. In asynchronous exercises, for example, students can work through the content at their own pace and according to their own needs.

Moreover, the teachers also attested to the ease and convenience they experienced when using technology in their lesson preparation, class discussion, or activities, assessment of students' outputs, and dissemination of information, among others. It was revealed in the study by Baek (2006) that one of the six factors that influenced teachers' use of technology was relieving physical fatigue. The teacher-respondents believed that using technology saved them time and physical effort in explaining, presenting, and working around the classroom.

Making classes motivating and engaging.

The second theme that emerged from the teachers' perspectives signifies that technology integration allows teachers to be more creative in conducting online classes while also allowing for more engaging distance learning where they can effectively catch the attention of their students. They believed that technology utilization brings new opportunities to enhance teaching strategies and techniques, improve student engagement, and

strengthen student participation in online classes. As they shared:

> *Technology integration is fun and engaging. One of the highlights of having online classes is that both teachers and students can become creative in the learning space. Using this online platform, introverts can interact with the teachers without any hesitation since they are allowed not to open their cameras. The opportunities for sharing ideas and asking clarifying questions are also advantages of using technology. In addition, I get to receive responses clearly, and it allows for maximum participation from the students, especially when doing activities in Kahoot. Students are learning while having fun. (P4)*

> *Learning and applying technology in class connect me to our technologically savvy students. In doing so, I can ensure that learners are engaged, and active participation is achieved. (P3)*

> *I do not think we can conduct online learning and teaching without technology. Using technology allows me to create the best instructional materials to engage with my students actively. (P5)*

> *Furthermore, teachers can also attract their students' attention through entertainment and engagement in their classes, in which technology acts as the primary means or mediator of learning. As the teachers mentioned:*
> *These instructional aids attract my students' attention, fuel their curiosity and creativity, and allow them to explore and learn the necessary technological skills. (P9)*

> *We know attention is significant in having class discussions. When students are attentive, it is an indication that they are present not just virtually but also physically and mentally. (P10)*

As supported by various authors, the study of Delgado et al. (2021) on lessons in the use of technology for science education during COVID-19 revealed that in the online classroom, technological tools are one of the alternatives in increasing students' engagement. Using live chat, threaded discussion, or blogs promotes participation and interaction among students and teachers. Hartman et al. (2019), in their case study on educators' perceptions of technology integration into the classroom, further validated the findings as their research revealed that technology use helps students focus on tasks, engage in the learning process, and pay attention. Additionally, according to Fleming (2021), educational technology is highly demanded, especially during the pandemic, to engage students in distance education. However, choosing the proper technology is not as easy as the wrong choice will lead to false engagement. He added that appropriate utilization of technology is vital to effective and successful distance education during the pandemic. Technology utilization is needed to keep students' attention and understand what teachers deliver.

Allowing access to vast and limitless sources of information.

The third theme that emerged from the perception of the teachers in technology integration during the pandemic shows that technology provided vast and accessible information, resources, and references and helped the students learn through websites and other sources. The teachers appreciated the use of technology because it allowed them to access a variety of resources for their lessons that they can directly provide and share with their students. Sharing and distributing teaching materials are much more convenient nowadays than in the past. As they shared during the interview:

> *I have seen the positive side of utilizing technology. Aside from the fact that it helps the students learn from the vast resources on the internet, it also allows them to learn independently. Another good feature of technology is that it makes various resources readily available. When appropriately used, several scholarly websites can become valuable sources of information. In addition, several practical YouTube videos can be suggested to the students to supplement the explanation and satisfy their curiosity. (P1)*

> *Unlike in the past, when we had to print and reproduce our lessons, learning materials are now readily available and accessible. (P9)*

> *I can now let my students directly access websites, let them participate in online quizzes, have them create infographics, or even scan QR codes that contain information about our class. (P10)*

> *Technology is beneficial for one straightforward reason: every student today, in the technological era, has a gadget, and the pieces of information is just a click of a finger. We can directly see and look for information related to the class and research to access a vast amount of data, unlike the traditional modalities. (P3)*

Furthermore, various researchers supported the results. In his study about computers in schools, Taylor (1980) revealed the roles of computers for students and teachers. These are tutor, tool, and tutee. The findings indicated that students learned through and with the computer. Serdyukov (2017) furthered the results as his study on innovation in education revealed that technology made access to information and resources more convenient for teachers and students. Information and references can be accessed anywhere with website links, online journals, and social media sites through the internet. Moreover, Korucu-Kis and Ozmen (2018) stated that teachers and students could benefit most in the technology era. Having access to various resources and websites in the palm of their hands is much more advantageous than 15 years ago when most information was retrieved based on printed materials.

Experiencing difficulty adapting to technology.

In terms of the challenges encountered, this theme encapsulates the difficulties and roadblocks encountered by the teachers in integrating technology into their classes during the pandemic. This includes having trouble navigating technological tools, applications, and LMS, grappling with the internet/data connection, having difficulty adapting to technology, and having inappropriate gadgets and insufficient data allowance. Teachers considered internet/data connection crucial in communicating with their students when using online education as a modality in teaching and learning because online classes and information dissemination are dependent on it. This is the most significant challenge or difficulty teachers have encountered when integrating technology into their classes, as it limits their ability to engage, enhance, and extend their learners' learning goals. The teachers shared:

> *As I have observed, the problem that I have encountered in integrating technology to extend learners' learning in their everyday lives is still connectivity. Integrating technology requires a fast internet connection or stable connectivity. In other words, technology might work best if students have a stable connection while learning. (P1)*

> *Based on my experience, the new mode of learning can sometimes be frustrating because of students experiencing audio issues. Students have difficulty hearing their teacher's (me) discussions. Internet connectivity is, I think, the major drawback when utilizing technology. (P2)*

> *The technological tools that I used to extend my lessons so that my students are still able to learn outside of our online classrooms are still dependent on the connection. (P10)*

> *There are disadvantages to integrating the technology. One is the unstable internet connection of students. For example, when using Kahoot in my quiz, if the students have unstable internet, they will experience delays in answering, thus affecting their performance. Similarly, accessing videos and other instructional materials that require internet connectivity remains a challenge. (P9)*

They did admit, however, that they had difficulty navigating not only the LMS but also other instructional tools, which prevented them from properly aiding student learning. Their problem with navigation is also attributed to limited knowledge, lack of training on the various tools and applications, and the kind of gadgets they used, as shared in the interviews:

> *The use of an LMS is more difficult compared to exploring digital applications. I always ask for help from the LMS officer to guide me and teach me how to use those unfamiliar applications. At some point, I also have the initiative to research on YouTube how to navigate or how a particular LMS works. (P5)*

> *Another problem that I see is that we, teachers should be taught on various digital platforms useful for teaching. With limited knowledge of technological tools and applications, I cannot fully utilize them in my teaching. (P6)*

> *I think technological literacy is needed. Even though I am a digital native already, there are still applications and functions in the LMS or any other app that I need to know about. (P8)*

> *To enhance my lessons and my learning goals for my students, I think my problem is my knowledge of these different platforms. I'm still*

> *new to these online platforms and I'm still in the stage of learning. That's why I think I must learn more and explore more so that I can enhance my lessons for the learning of my students. (P9)*

These challenges are also supported by some researchers. Khan (2021) in his phenomenological study about digital technologies and the barriers K-12 teachers face during a global pandemic revealed the following difficulties encountered in implementing distance learning: an insufficient connection to the internet, insufficient infrastructure and equipment, insufficient human and financial resources, and insufficient pedagogical and teachers' computer skills. Similarly, Arzouma et al. (2021) stated that barriers to the effective use of ICT in education during a pandemic include infrastructure problems, connection failures, slow internet access, technical problems, lack of personal computers, and technology literacy. It was also found out that insufficient resources and a lack of internal support for ICT use are additional concerns both from students and faculty.

Having a positive attitude towards technology integration.

The final theme summarizes the teachers' positive attitudes in managing and coping with the challenges they experienced in using technology in their classes. These favorable attitudes are manifested in their ability to adapt to technology integration, collaborate with others for support, and attend webinars, workshops, and training to improve their technological skills.

The teachers expressed that they have successfully adapted to the new educational modality through self-exploration and learning, open-mindedness to new possibilities, persistence in learning, and constant exposure to technology integration. As they shared:

> *The pandemic teaches me to practice self-learning, strive to learn new things, and adapt to the latest trends in education. I think it is a must since the teaching and learning set up in our school (GADTC) calls for technology application and integration. I need to explore the use of technology for my students to be more participative and interactive in our class discussions. (P4)*

> *As teachers, we should always be open to all possibilities of learning, hone our crafts in the use of technology, learn new applications to improve instructional delivery, and keep ourselves abreast of the new trends in education. (P1)*

> *I would recommend it to the teachers not to stop exploring the new platform that we have. Although it's difficult to have this kind of setup, we still need to strive harder to improve and equip ourselves for the future. In addition, tutorials on YouTube and other sites may be useful guides in practicing and navigating the various digital tools. (P7)*

> *We need to continue to learn, venture, explore, and use technology. Based on my experience, the disadvantages of using technology are way far from the advantages it brings to us, especially in education. So again, let's continue. Let's try to use it, and I can assure you that, it will make our lives and work easier. (P10)*

> *I should keep on discovering because there is still a world that I need to explore. I must keep a positive attitude towards technology and hope that I can really learn and improve. Constant exposure to and use of technology will help me advance my skills. (P6)*

Additionally, adapting to the new trends and modalities requires teachers to be critical thinkers. At times, when there were instances in which they did not know how to operate a certain application, they looked for alternatives and adjusted their ways. As they mentioned during the interview:

> *As I have mentioned, one of my difficulties is mastering the different technology applications. I do not know much about how to use those tools, so I resort to using Google forms. In most of my classes, I have been using several applications to address the needs of my students. For example, I have used MS Teams for other students while opening Facebook to accommodate those who do not have an MS Teams account yet. (P1)*

> *To adjust and help my students. Even if there are challenges, I will continue to find ways to effectively deliver my lessons. I find other ways or alternatives, like posting references or doing asynchronous classes. (P2)*

> *As I have mentioned, I have encountered challenges like connection problems, lack of*

> *gadgets, and digital illiteracy. I have managed these through adjusting and finding ways to address these needs. (P10)*

The teachers' positive mindset was also shown in their initiative to collaborate with others to solve immediate problems. They sought help from the authorities and experts, and they shared best practices among themselves to improve their performance. The teachers mentioned:

> *To help us teachers in the transition, we need to communicate and collaborate. Communication and collaboration are our means of ensuring success in the use of these technological apps. We share our best practices in class, like the different technological apps that we successfully used to engage the students in our class. We learn from each other. (P5)*

> *I think it is important to seek help from colleagues and other experts. (P9)*

> *For the teachers who are already using technology, let's continue and learn more. Also, let's influence others by sharing what we know about technology. Let's collaborate since we have the same goal: to educate and build the dreams of our students, especially in this 21st century when technological skills are a must. (P10)*

Furthermore, the teachers also mentioned that attending webinars, training, and workshops organized by other institutions or organizations helped them effectively facilitate the integration of technology into their online classes. They shared:

> *Teachers and students must be adaptive to the needs of online education by constantly improving themselves in the effective and efficient conduct of online classes through attending seminars and training. (P8)*

> *I always look for ways and means to attend seminars and training regarding the proper, and effective ways of operating, manipulating, and navigating the online educational apps and platforms, even if it is at my own expense and even if the school is not initiating one. (P9)*

The positive attitudes shown by the teachers in this study are important factors in developing educational practices relative to technology integration. The findings discussed in this section find support in the study of Batanero and Ruiz (2015) on ICT and inclusive education. Their study revealed that there is a positive attitude among teachers in inclusive classrooms towards the use of ICT. Teachers are aware that ICT is an essential tool to support attention to student diversity. More so, the mixed-methods study by Mustafina (2016) on teachers' attitudes toward technology integration found that teachers possess positive attitudes toward ICT in school mostly due to the advantages that technology offers, such as distance learning and visualization of the material (3D programs).

In summary, the teachers of GADTC possessed the necessary knowledge, skills, and abilities for technology integration, though teachers and students had varying perceptions of the levels of their competence. The teachers also recognized the significant contributions of technology integration in helping the teachers facilitate teaching and learning and making classes motivating and engaging in distance learning. Learning is made more convenient and more manageable by technology's easy access to various tools and applications, as well as vast and limitless sources of information.

Though the teachers faced many challenges in the integration of technology, their positive attitudes, such as collaborating with knowledgeable others and being open to professional training and development, made their adaptation to technology successful.

CONCLUSION AND RECOMMENDATIONS

Technological integration becomes inevitable during this time of the pandemic. Thus, it is noteworthy that the students and teachers of GADTC have high perceptions of the technology's role in engaging students in the learning activities, enhancing students' understanding of the key concepts, and extending students' learning in their daily lives.

Although there is still room for improvement, teachers may find it easy to harness their technological expertise knowing that they recognize the usefulness of technology in distance teaching and learning. Their positive mindset for adapting to changes by collaborating with significant others and working for personal and professional growth also contributes to their success. Resistance is never the language of the teachers.

From the findings and conclusion, it is recommended that college administrators may continue to conduct training and workshops to help their teachers harness

their technological knowledge and capabilities in integrating technology into their classes, as it has been discovered that technology integration in distance education is beneficial not only to students but also to teachers. The in-service training should focus on using technology to help students become lifelong learners by shifting their behavior from passive to active social learners, making instructional technology more effective than any other instructional material, and assisting students in becoming lifelong learners. For the teachers, they may revisit and re-evaluate the course modules for the online learners to ensure that the technological tools used in the virtual classrooms are reflected in the learning modules and total teaching-learning experience.

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