DIGITAL TECHNOLOGY INTEGRATION AND PRACTICES IN THE TEACHING OF ENGLISH AS A SECONDARY LANGUAGE (ESL) AMIDST COVID-19 PANDEMIC: THE CHINESE CONTEXT

Cao Xueqing
Huaiyin Institute of Technology
Huai'an City, Jiangsu, China

Racidon P. Bernarte
Polytechnic University of the Philippines
Manila, Philippines

ABSTRACT

The study reviews the practices and integration of digital technology (DT) in the teaching and learning of English as a Second Language (ESL) in China by ESL teachers. The review examines the forms of the various types of digital technology that are utilized in the classroom, the role that digital technology plays in the instruction of English as a second language (ESL), the potential advantages of utilizing DTs in ESL education, and the challenges that prevent the integration of DTs in ESL education. It was determined, based on qualitative analyses of the reviewed literature, that DT was highly utilized, that schools provided support and venues to strongly encourage the use of supplementary educational platforms, that digital-based technologies have had both positive and negative effects on student learning, and that digital-based technologies have affected teachers' instructional pedagogy. Furthermore, it was determined that schools provided support and venues to strongly encourage the use of supplementary educational platforms during the pandemic. Although technological constraints associated with digital technologies were revealed, the COVID-19 pandemic increased the adoption of digital-based technology in ESL classroom.

Keywords: *Digital technology, English as a Secondary Language, Chinese education, pedagogy, COVID-19.*

INTRODUCTION

Technology has historically influenced human growth and education. E-learning, a significant form of digital technology, is the process of educating and training students using computer access to online resources, e-textbooks, and electronic courseware (Cross, 2004). According to Cross (2004) and Hubackova (2015), the Computer-Based Training (CBT) system conference in Los Angeles, California in 1999 was the first time e-learning was presented. Since its inception, CBT has been widely implemented around the globe. According to conference reports, the most effective kind of training is a combination of conventional learning and e-learning approaches (Bitner & Bitner, 2002). E-learning, mobile learning, and other kinds of digital technology have become indispensable to learning, training, and professional development in both organizations and institutions. E-learning entered China (Tong, 2014) in 2001. Beginning in 2002, several Chinese financial institutions and telecommunications businesses, such as the Business Bank of China, China Mobile, and China Telecom, had already used e-learning (Tong, 2014). Many rural elementary and middle schools implemented eLearning in 2003 with the help of the Chinese government (Chen, Chen, & Wang, 2009). E-learning has steadily proved its advantages in terms of labor, time, and human resources (Yusuf & Al-Banawi, 2013) in this rapid development process.

Several key factors are associated with the idea of e-learning. First, eLearning emphasizes online education. Second, it stresses the integration of any information-based technology with learning. Thirdly, it emphasizes the integration of digital material and online resources. All three parts emphasize digital technology and the process of designing and directing education using new digital tools. The fast growth of web-based interactive multimedia technologies and information and communication technology presents new prospects for the improvement of education (Md Ali & Richardson, 2012). Mobile learning, or m-learning, refers to long-distance learning using mobile devices such as mobile phones and personal digital assistants. Its most notable characteristic is that it enables students to study whenever and wherever (Hockly, 2013).

All parts of society are entering the information age, which is heavily dependent on computer science and the use of multi-media to disseminate information (Hamidi, Meshkat, Rezaee, & Jafari, 2011) due to the rising use of the internet and information technology. Information technology has permeated every facet of everyday life, employment, and education. It also plays an expanding role in education due to the numerous benefits it provides. Computer-based technology may improve students' cognitive growth and self-assurance; it can also motivate students and facilitate their study by giving several information access points (Tamim et al., 2011).

The development of information and communication technology has also had a significant influence on the study of foreign languages (Jauregi & Banados, 2008). For example, technology is extensively employed as a tool to help English language learners' vocabulary acquisition. The usage of flashcards on the computer to assist students acquire new vocabulary has been described by Nakata (2011). Using technology for language learning, such as video/audio devices and translation software, may make instruction more appealing and boost student involvement. As a result, information technology has been continually developed and implemented in the field of education with far-reaching effects. Especially in education, digital technology has

substantially turned a new page. One may say that the enormous benefits of digital technology are driving an education reform (Shoffner, 2010).

In tandem with the fast growth of science and technology, a substantial number of Chinese students are utilizing social media and technologies to study a second language, particularly English. Traditional classroom teaching and learning approaches have been increasingly displaced by online learning and remote education. These advancements might encourage the creation of more apps and technical products. Because of its ease, technology-supported language learning has grown increasingly popular.

Traditional language instruction in China caused many language students to struggle with speaking and listening. In China, English teaching techniques have traditionally emphasized reading comprehension while disregarding the development of speaking and listening abilities in big classes. Due to the enormous number of students enrolled in English classes, it is challenging for each student to talk during class. While there is a tremendous demand among Chinese students to study English, the large number of students in classrooms, lack of interactive teaching techniques, and lack of native English language teachers make it difficult for Chinese students to successfully learn English (Wright & Zheng, 2018).

The period of the COVID-19 pandemic has witnessed an extraordinary global use of digital technology in all industries. Indeed, higher education has been one of the most significantly affected institutions. Considering that practically all classes and educational activities are migrating online (either voluntarily or involuntarily), a conversation concerning the nature and role of educational technology seems unavoidable and essential. How can professionals in higher education use digital technology to improve learning and instruction during and beyond this unique period? Moreover, even before the pandemic, with the emergence of ever-increasing use of new technologies in education settings, how digital technology has transformed teaching and learning has been a matter of interest to several practitioners and academics. To contextualize this wide issue, it is noteworthy that there is impetus toward the use of new technologies, particularly Information and Communications Technology (ICT), in English as a Second Language (ESL) lessons in China. This movement appears to be primarily motivated by a desire to modify the conventional memorization-based methodology that was frequently employed in second language programs in China (Li & Walsh, 2010).

Consequently, the purpose of this review is to explore how digital technology was incorporated to enhance relevance and motivation, thereby enhancing ESL learning and instruction. This research will center on the all-encompassing term "digital technology." Numerous words are used to characterize the use of new technology to educational practice. The literature contains several references to e-learning, digital technology, and information and communication technology. Typically, these names refer to a certain technology or mode. I am interested in a larger scope of technology advances utilized in ESL training for this project. These methods may be as basic as PowerPoint or as complex as smartphone applications. In summary, I intend to investigate how, why, and what outcomes occur when Chinese ESL teachers attempt to employ the growing technology, they have access to in teaching a topic that has historically been presented in a highly regulated fashion. Regardless of their varying levels of technology, they all use some form of cyber-connected technology. In other words, each member is seeking

to incorporate digital technology into their practice in some capacity. This endeavor to utilize digital technology is the center of the investigation.

With the urgency of assisting Chinese students in acquiring English proficiency and the need for research that investigates the nature of digital technology use in language learning, the purpose of this review is to investigate the current application of modern information technologies in English teaching and learning in Chinese education. This review's results may contribute to a better understanding of what teachers know and understand about digital technology use and the technologies they perceive as most beneficial.

LITERATURE REVIEW

Digital Technology Use in Education: A Historical Background

According to the assertions of Davidson and Tomic (1994), the emergence of digital technology has sparked innovation and caused a reassessment of the traditional approaches to the teaching and learning of languages. It is interesting to note that some academics even go so far as to say that the new technology may serve as a type of cure for the difficulties that are associated with ESL instruction, including a lack of relevance and motivation (Nunan, 1989; Cohen, 1993). Irrelevance and a lack of enthusiasm among students are issues that are present in most of the traditional English language instruction in China. The actualization of the promise of digital technology is not, however, a foregone conclusion; rather, it is heavily dependent on the manner in which people utilize technology (Cabanatan, 2003), as well as the social-cultural contexts in which they do so.

The 1960s were the beginning of the use of technology to support classroom instruction. The United States of America was the first nation in the world to conduct research and practices in the field of computer-aided instruction (CAI) (CAI). Research on computer-aided instruction (CAI) was initiated at Stanford University as early as 1963, and in 1996, thanks to collaborative efforts with IBM Company, the IBM1500 teaching system was successfully produced. The IBM1500 teaching system has been utilized as an adjunct instructional approach for a wide variety of classes, including those devoted to the study of foreign languages. Since then, a great number of nations have been hard at work throughout the course of the previous years developing instructional technologies.

A significant amount of study has also been conducted about the efficacy of teaching methods that are aided by technological means. Chun and Plass (1996) discovered that children can grasp unknown words with graphic and audio picture more effectively and more quickly than words without the assistance of multimedia. Mathews (1997) investigated how the use of interactive disks in the classroom affected students' reading abilities. She made the observation that the students who were directed by CD-ROM had a tendency to repeat the entire material of the book more thoroughly than the students who were just guided by the text itself.

In light of the multifaceted setting in which this investigation is situated, the following discussion will begin with an analysis of the general application of digital technology in Chinese education particularly in the teaching and learning of ESL, followed by a

consideration of the opportunities and obstacles presented by the use of technology in Chinese classrooms during the pandemic. In the last part of the review, we will take a look at the research that has been conducted explicitly on the application of digital technology to English language teaching and learning in Chinese primary, secondary, and tertiary schools.

Digital technology in Chinese Education

There are a great number of studies being conducted in the home country of China that are centered on the utilization of technology in the classroom. The use of multimedia in the classroom has been shown to improve students' learning outcomes, cultivate their interests in foreign cultures, and even break down students' fear of the English language. This was discovered by He (2015) through the implementation of multimedia in the classroom during the teaching of English nations' cultures. The findings imply that it is vital to use multimedia while teaching English since virtually all the senior students said that their interest in English was made to increase when it was incorporated in instruction.

Multimedia Technology

Given what has been said above, it should come as no surprise that digital and multimedia technologies play a vital role in the Chinese educational system. The term "multimedia technology" refers to the comprehensive processing and management of the various types of media information, including but not limited to text, figures, numbers, pictures and images, flash, video, and sound, in order to provide computer users with the ability to access real-time information in an interactive manner (Wroblewski, 2013). The effectiveness of learning is significantly improved when multimedia is employed in such a manner as to make the most of a comprehensive range of communication options. Consequently, a high level of organization and presentation is required for any educational design that incorporates multimedia. In addition, there are other sorts of multimedia approaches, each of which has a unique set of benefits and drawbacks.

Text

Students are presented with textual content of instructional material rather frequently when they are taught through multimedia. Most of the time, this is done with the help of a computer, which allows the user to access PowerPoint presentations or material from the internet. It is typical practice to use this approach when trying to provide students the option to study at their own speed. In addition, several pieces of educational software provide students comments and feedback, in addition to providing direction depending on the requirements of the specific student. Text users do not require any specialized training to access the instructional information provided by this kind of multimedia, which is one of its many advantages. Students can read the book several times, which increases their chances of developing a deeper comprehension of its meaning. If students have access to a text-browser, the amount of time that may be

spent reading a text does not have to be restricted in any way.

Pictures and Images

Learners of all different types utilize a variety of instructional strategies and routines. Some people are excellent at learning from reading text, while others prefer to observe, identify, and find the substance of the learning materials with the assistance of pictures and images. Some people are good at learning from reading text, while others prefer to read text. The use of pictures and other forms of non-textual information, like as diagrams and graphs, may be an effective means of conveying conceptual knowledge to students in a manner that is more straightforward and tangible than would be possible with text alone. The utilization of pictures and images provides learners with a variety of learning approaches, and these ways are particularly useful for learners with a visual learning style. In addition to this, the use of pictures and images is an effective way to transform abstract material into tangible content. In addition to their functional use, pictures may be utilized for their aesthetic value to improve the user interface of the computer and to highlight the learning environment.

Video Clips and Sound

The learners' sense of visual learning can be stimulated thanks to the dynamic nature of video clips. The use of sound in education can make learning more engaging and objective by providing a more direct experience. It is possible to increase students' interest in studying by incorporating audio and video into classroom instruction. The processing of sound and video has made it possible, thanks to the development of multimedia technology, to combine the visual and audio information of a television-style presentation with the interactive functions of a computer, making it possible to create integrated teaching material consisting of sound recordings, videos, and still images. Utilizing multimedia in such a way provides a number of benefits, including a diverse selection of information, the ability to connect with other forms of media, integration, digitized information, and real-time updates (Chen, 2005). Therefore, the utilization of video clips and sound can be of assistance in the accomplishment of interactive work as opposed to the unidirectional or bilateral transmission features of instructional modalities.

Distance Learning (E-Learning)

Distance learning is a type of institutionalized system of teaching and learning that is designed for delivery across geographic distant using cyber and/or web-based technology. It is also known as e-learning, which is another name for distance learning. Those who are unable to participate in the more conventional forms of education can nevertheless benefit from the teaching and learning possibilities provided through distance learning. Learners have a broader variety of alternatives and possibilities at their disposal when they participate in remote education since it is more adaptable in terms of both time and geography and can practically reach any location. There is more than one kind of learning that may be done at a distance. In the past, the major method

for remote learning consisted of correspondence study, which was completed through the use of the mail. In later years, methods for distant learning such as education via television and broadcast teaching became popular. E-learning, in its many guises, has largely supplanted the formerly prevalent types of distant education in recent years. E-learning, in its most common form, refers to the delivery of electronic courses in the form of online or pre-packaged courses to students who are located in remote areas. In point of fact, e-learning, in all of its many guises, is currently the form of remote education that is most widely used (Bernath, 2009). While there are many positive aspects to studying at a distance, there are also some negative aspects. For instance, using educational resources to educate huge numbers of individuals spread out across wide locations is possible with distance learning; yet, this type of education might also lack meaningful connection between the teacher and the student.

According to He (2013) and Chen (2009), information imparting teaching and cooperative teaching are the two primary modes of instruction that may be distinguished within the context of internet-based distant education. A top-down technique, in which teaching is sent down from the teacher to the pupil, is characteristic of the information-transfer mode known as information imparting mode. The majority of the education is delivered in a linear fashion and, in this respect, is comparable to that which is delivered in a conventional classroom setting. In most cases, teaching and information-giving are both carried out in one of two ways. The education can take place in either a synchronous or an asynchronous fashion. Synchronous teaching is the more traditional method. The first term is shorthand for "real-time teaching," which is an approach to education that is analogous to the standard classroom setting. Through the utilization of real-time video and audio, the interaction that takes place between the teacher and the students may be accomplished. This particular method of instructing calls for a network speed that is rather high, in addition to a camera and a microphone, amongst other associated pieces of apparatus. Asynchronous training requires the creation of educational content by the teachers, which is then stored on a web server. After that, students have access to these instructional resources over the internet. Additionally, students and teachers are able to communicate with one another via e-mail, a learning management system, or even chat software. This allows for two-way communication.

The capacity of the students to engage with one another and communicate with one another after having studied the same curricular topics is referred to as the cooperative teaching pattern. Students participate in the learning process by acting out a variety of roles in this manner of education. These roles include the roles of the competitor, coworkers, classmates, problem-solvers, and guides (He, 2013).). The provision of adequate and efficient ways for students to meaningfully engage in cooperative learning activities is a difficulty for the implementation of cooperative learning in remote education, which is one of the challenges.

Cell Phone Technology

People's day-to-day lives have been profoundly impacted by the proliferation of different types of mobile phones, particularly smartphones. In addition, the

development of modern communication technologies, including the advancement of technology for cell phones, has opened up new avenues for students' educational pursuits. Students' access to various learning chances, including as those provided by Wechat, QQ, e-mail, homework assistant, learning treasure, pocket teacher, and happy learning, has been significantly altered (Wu & Marek, 2009).

Xu and Dai (2013) conducted study on several instructional methods using Wechat, which is an interactive platform that helps students preview, revise, and practice the English language. Unfortunately, the authors indicate that there is insufficient information to draw any conclusions regarding adult learners' perceptions of Wechat as an efficient means to learn English. This is unfortunate since the authors were hoping to draw inferences about adult learners' attitudes about Wechat. Wu and Marek (2009) utilized Wechat to assist in their study toward obtaining their CET certification. To be more specific, the goal of their study was to investigate whether or not using Wechat may help students in China pass the CET exam. According to the findings of their research, WeChat is a useful tool for educational purposes. However, the authors stress out that the English material on Wechat has to be brief, and the English vocabulary needs to be both practical and appropriate enough for students who do not yet have a systematic vocabulary.

Guo (2014) contends, in line with the findings of other studies, that mobile devices such as cell phones have the potential to be an efficient instructional medium. According to the findings of Guo's research on the use of mobile technology to the teaching of English, it is imperative that the quality of follow-up services be assured and prepared fairly in order to provide the students with the appropriate pedagogical assistance. In this sense, the technology included in cell phones may be a helpful tool for anyone learning Chinese.

Opportunities and Challenges of Digital technology in Chinese Education

Fan and Antle (2020) examined how the use of an augmented reality (AR) program may help students in rural China improve their English language skills. By virtually immersing Chinese students in specialized educational settings, augmented reality technology can help students improve their understanding of the English language's complex set of rules. Students are able to legitimately learn language norms while also having exciting experiences in this type of virtual reality area, which enhances their learning. Students may ask questions and communicate with one another in this type of place.

Klimova (2018) further claims that mobile phones and the applications available for smartphones can help Chinese students learn English. The findings of her research indicate that mobile phones and various applications can have a good impact on those who are learning English. The growth of students' vocabularies and even their levels of interest in studying have improved as a direct result of their increased competency. Gangaiamaran and Pasupathi (2017) also examined the usage of several mobile applications for English instruction. According to these writers, mobile applications (which include platforms for laptop computers, iPods, iPads, and smartphones) provide teachers with handy avenues for English education that are not restricted by time or place.

After reviewing the pertinent literature, it is clear that DT has significantly contributed to the advancement of second language acquisition, not only in the United States but also in other countries (Thorne & Payne, 2005; Zhao, 2003). In a review of the many approaches and studies pertaining to the integration of digital technology into the instruction of foreign languages, Warschauer and Healey (1998) It may be argued that developing digital-based technologies, when utilized appropriately, can considerably help both learning and teaching by producing a more engaging learning environment, motivating learners, and providing genuine language input obtained from real-life events. Notwithstanding this, Cabanatan (2003) advises that the good potential of digital technology does not necessarily guarantee positive results, and that the reality of increased learning is dependent on how successfully each individual teacher employs technology in his or her particular classroom. Similarly, Bitner and Bitner (2002), argued that the efficiency of the incorporation of digital technologies will primarily depend on the skill sets and mentalities of the teachers.

On this note, one may reach the conclusion that the implementation of educational technology and the manner in which it influences the process of learning is a complicated matter that requires more investigation into a variety of unique contexts. Some academics conducting research on the application of technology in language instruction in China acknowledge the complexities of the topic and concentrate their attention on certain contexts. On the other hand, the vast majority of educational researchers are focused on secondary or elementary education. For instance, Li and Walsh (2010) conducted a large-scale study on the use of ICT with 450 secondary school English teachers in Beijing, China. They found that although the majority of schools provide a satisfactory learning environment with computers, the use of digital technology is primarily limited to PowerPoint presentations. This was discovered after the researchers found that although most schools offer a satisfactory learning environment with computers, the use of digital technology is limited to PowerPoint presentations. They identified a number of problems, such as a shortage of time on the side of teachers and an absence of sufficient professional assistance and training, as having a negative impact on the efficiency of digital technology. Similarly, Zhong and Shen (2002), after looking at two different ESL classrooms in China that used multimedia, the researchers came to the conclusion that "the traditional Chinese notion of teaching" and teacher-centered pedagogy need to be rethought in order to make room for "a learner-centered multimedia language classroom to emerge". In point of fact, the studies that have been conducted to this point on Chinese secondary ESL classrooms show that the efficacy of education is in no way innate, but rather is contingent on a wide variety of intricate social and cultural factors, each of which is likely to vary depending on the environment in which it is delivered.

Digital Technology and English Language Learning in China

A significant amount of investigation has been spurred by the widespread use in China of a wide variety of digital technologies as teaching tools for the English language. Additionally, it has shown facts and conclusions that are contradictory. In this part, some of the research that has been conducted on this subject is presented, and a variety of the findings are discussed.

Bond (2000) states that people who teach English in China suffer a significant amount of challenges. The anxiety that many students feel when striving to improve their English language skills is not the least of these problems. Bond asserts that when instructional direction is offered to fifty percent of Chinese students, they refuse to follow it, mostly as a result of their reluctance to engage in English study. Sandholitz, Ringstaff, and Dwyer (2000) reported that using digital technology in the classroom to teach English as a Second Language is a double-edged sword. Students frequently enjoy themselves because of the newness of the technology, but they continue to be resistant and anxious about the educational process. Chen, H. (2005) discovered that a lack of abilities in the English language, which causes students highly self-conscious and trepid, is a significant factor in a student's unwillingness to learn English despite the student's strong desire to do so.

Zhang (2022) addresses a number of challenges that are associated with the implementation of digital technology in the teaching of English in secondary schools. According to him, the application of digital technology is typically restricted to the use of PowerPoint (PPT) presentations. In addition, there is a widespread misconception that making use of PowerPoint presentations in the classroom constitutes the use of digital technology. Zhang conducted an investigation into how and when the use of digital technology may be beneficial to the teaching of English by combining a study of teaching practices with a theoretical analysis of teaching methods. First, he examined the use of multimedia in education by looking at it from the perspective of the constructionist theory, the audio-visual theory, the learning style theory, and the multiple intelligences theory. After that, he contemplated the style of use of digital technology in classrooms in relation to the following four components: reading, writing, listening, and speaking. In particular, Zhang, (2022) carried out a study at an important school with the participation of sixty-five kids serving as research participants. The purpose of this study was to evaluate whether or not the use of digital technology in English classrooms is successful in piquing the interest of students in their own education and improving the quality of their knowledge retention. The findings indicate that teachers can make efficient use of a variety of forms of multimedia by utilizing digital technology. These forms of multimedia include music, e-text, video, PowerPoint presentations, and screenshots of films and news broadcasts. In point of fact, ninety percent of the students stated that the use of digital technology assisted them in significantly improving their English language abilities. Students were able to study English more effectively after class by using digital technology, in addition to the technology that supported their English learning while they were in class.

There has been an increase in the number of innovative ideas concerning language learning and teaching in Chinese colleges as a result of the broad implementation of English teaching changes brought about by digital technology. As a consequence of this, it is thought that students in China may gradually become awakened to their own autonomy and ownership in the learning process (Bond, 2000).

However, there are significant obstacles along the way to overcome with this approach. Zhang (2022) investigated the ways in which computer-based technology can be used to improve English education. The findings of the study showed that despite the fact that Chinese college professors have a significant amount of enthusiasm for integrating the use of the internet into their lessons, they do not provide

their students with sufficient guidance and assistance. Unfortunately, students lacked confidence in their ability to make effective use of the web-based tools that were made available to them for English language study. The majority of the participants, despite the fact that they utilized the internet to further their education, felt that their use of the internet had no useful function. This attitude was primarily owing to insufficient aid and guidance from their professors. The findings showed that despite the fact that the students had a strong desire to combine their study of the English language with the usage of the internet, they did not have a clear understanding of how to make the most of the numerous resources that are accessible via the internet.

An intriguing finding from this investigation was that Chen. K. (2010) students were asked to complete a study that investigated how learning English via the internet may be utilized to assist students in recognizing acceptable emotional reactions. Central to this study were such issues as: How might emotional events be integrated in the web-based English learning process? In the context of web-based training, what types of typical emotional issues may be modeled? How can students make the most of these psychological aspects to improve their English language proficiency when using the web? In the study, there were a total of forty Chinese literature majors. The findings showed that when students were given internet-based multimedia teaching materials, in particular when they were given audio-visual videos and other related materials, they were much more likely to actively participate and correctly interpret appropriate emotional responses. This was especially true when the students were given the audio-visual videos and other related materials. On the other hand, when they were only shown the text, they did not demonstrate any genuine emotional responses; in fact, the majority of them had "no sentiments," and some of them were even bored.

Ji (2014) investigated how the use of digital technology, namely an internet-based strategy, may be of assistance in the process of instructing students in English. Her inquiry revealed that the students who participated in the study had positive attitudes on the usage of internet-based learning. On the other hand, the findings shed light on a number of significant subtleties and consequences. The students claimed that they had a high amount of control in their own learning pace; yet, they were unclear about the success of the learning tactics that they were using. It is noteworthy that the majority of the students exhibited only average levels of enthusiasm and a lack of initiative to participate in English-learning activities based on the internet. They demonstrated a low level of self-confidence regarding their capacity to learn English and a great dependence on the guidance of their English teachers. The fact that autonomous learning capacity was shown to have a strong correlation with motivation within the classroom suggests that conventional teaching approaches are still prevalent in China. As a result, now that learning environments in China are being revamped, Chinese teachers have to think about altering their responsibilities and cultivating learning practices that enhance the intrinsic learning motivation of students in order to obtain improved learning results.

Zhang. X. (2009) utilized social interaction theory to investigate how training utilizing online resources may modernize conventional methods of teaching English in China. According to social interaction theory, the most productive approach to learn English is to engage in conversation with native speakers. The study contrasted the process of learning college English through the more conventional methods with the process of

learning with the use of internet-assisted multimedia and the task-based approach. In the second method, the students were assisted in developing their capacity for independent thought, and the instructional activity provided them with opportunity to practice a variety of interpersonal skills through the use of group projects. The use of multimedia in the classroom did not mean that the teachers were passive participants in the learning process. Instead, their job required them to take on responsibilities such as assisting, organizing, progressing, and mentoring others. She came to the conclusion that the task-based method could be successfully implemented in an environment that utilized the multimedia online teaching technique. Students were given the opportunity to participate in a variety of authentic communication contexts that were interactive, controlled, imitative, and active thanks to this method. The kids' learning was significantly increased as a result of this strategy, and it also helped to increase the students' enthusiasm in studying English.

Li & Walsh, (2010) examined the positive effects that using digital technology may have on undergraduate English classes. He separated the benefits into two categories: those that are beneficial to the teacher and those that are beneficial to the students. The use of digital technology allows teachers to boost their productivity while simultaneously reducing the amount of time spent on instruction. For example, in the conventional method of instructing, a significant portion of class time is dedicated to writing on the chalkboard. The utilization of multimedia tools, on the other hand, frees up more time for the delivery of the content of the course itself. In addition, the use of digital technology helps to emphasize important and challenging teaching topics, which enables teachers to more effectively elucidate confusing subject matter. The use of digital technology may help students learn a foreign language more quickly and thoroughly, which is beneficial to both parties. Students are able to work more quickly through the content and improve their language understanding thanks to the accessibility of digital technology, which comes with well-organized course material. Additionally, the students' enthusiasm in studying English is increased as a result of this. The students' cognitive grasp of the language improves, and the teachers are able to take advantage of the digital technology to make the lessons more exciting and appealing to the students.

Furthermore, in accordance with Li & Walsh,. (2010), if implemented correctly and with sufficient structure, digital technology has the potential to foster a more collaborative connection between teachers and their students. In other words, teachers and students are able to exchange digital materials, practical experiences, and scientific accomplishments over the internet. In this way, teaching with computer- based technology can change the traditional relationship between teachers and students and further establish a more equal relationship in learning. Such a relationship offers each other the chance to learn together and learn from each other. In a traditional teaching pattern, teachers are at the center of the instruction dynamic. However, the inclusion of digital technology encourages greater participation of students and they are invited to create a more authentic English language environment. The application of digital technology can help improve students' listening and speaking abilities with a wide variety of multimedia aids. Such a varied approach lets students get involved in an English language environment in a more immersed fashion and becomes part of their daily lives. Ultimately, this teaching pattern is more student-centered and under this

situation students have greater opportunities to express themselves in English.

Students' Preference of Digital Technology in ESL Learning

Li (2021) explored how the students reception of Digital technology in ESL learning. Students in China prefer some form of digitally based technology that enables a more open-ended and unrestricted approach to learning, according to observations made of classes taught by teachers in China when the epidemic was going on. The widespread use of mobile communication and network technologies in people's day-to-day lives has had a significant influence on the educational expectations that Chinese teachers have for their students. Within this framework, students' approaches to learning English have grown more differentiated and specific.

Teachers of English as a second language held the belief that each student had unique requirements, as well as distinct judgments and expectations of her as a teacher. When compared to their activity in Rain Classroom, ESL students' participation in contributing comments to the bulletin was significantly higher. They believe that the attitudes that students have about the platform are conveyed to the rest of the class, which is a benefit. On the other hand, the increased emotional impact does not automatically result in beneficial learning consequences. Students will occasionally simply chitchat through the bulletin comments, as mentioned by ESL teachers (and confirmed by the teacher during the class observation), which was seen. As a result of its stringent surveillance and reporting of each student's activities, Ding Ding is disliked by a significant number of students. Zoom is the platform that most ESL teachers like to use while conducting group class meetings. For instance, students participate in a variety of activities, such as discussions and presentations on ancient Chinese rituals, during their class time devoted to listening and speaking skills. There are a lot of groups, and a uniform virtual avatar has been given to each one of them. Students can record themselves presenting the facts they have acquired in their own "rooms" while using the Zoom software. The reading and writing components of General English are often taught in Rain Classroom by ESL teachers. There is an element of challenge involved in this activity due to the fact that it consists of a group lecture and covers more complex aspects of grammar. Because of this, she expects students to submit feedback in a timely manner. As a result, the bulletin screen that is made available in the Rain class is both efficient and practical. Teachers of English as a second language draw the conclusion, after reflecting on the learning dynamics of their students, that various teaching activities usually demand different digital technologies. They are of the opinion that the current teaching platform that is required by the school is not adequate for the distribution of information to groups; nonetheless, they feel that it is highly handy for the display of information to groups. In addition, ESL teachers believe that the Rain Classroom platform is neither suitable for the sharing of group material, nor is it practical for the delivery of group presentations (Li, 2021).

Auxiliary learning platforms, like as iClass and Rain Classroom, are excellent options for students who have a strong level of self-discipline and prefer independent study. The influence that these various teaching platforms have, according to ESL teachers, varies from student to student. In the end, there are some students who enjoy using these platforms, and such digitally-based technologies have beneficial consequences;

on the other hand, there are some students who do not like using these platforms, and the influence of these platforms is, at best, quite little. When these factors are considered, the influence that digital technology has on students studying English as a second language in China differs depending on the student's individual preferences and preferred method of education. However, in their opinion, the vast majority of students desire and anticipate that teachers will make use of some form of digital technology (Li, 2021)..

Digital Technology Advantages Versus Traditional Teaching Methods

A study by Tsegay et al., 2022 investigate the experiences of Chinese university teachers during the COVID-19 pandemic. The authors place a particular emphasis on the teaching and learning methods that were utilized, as well as the benefits and difficulties that were encountered as a result of the process. ESL teachers are of the opinion that students are able to demonstrate greater initiative and independence when they participate in digital and computer-assisted education. Students are provided with the opportunity to individually master challenging content. The time spent studying is not restricted to the forty-five minutes that are allotted for classroom instruction. Because of this, the student's own initiative has the opportunity to be fully used and further developed. Students who already have a comprehensive knowledge of the subject matter can progress their level of comprehension at their own rate, which may be significantly faster than that of their classmates. On the other hand, students who have a lower level of understanding of the content can increase their knowledge via repeated practice with the assistance of other platforms, such as Rain Classroom, which does not discriminate against them while using iClass computers. In addition, traditional teaching methods have a number of drawbacks that can be mitigated by the use of computer-assisted training. In particular, teachers of English as a second language said that the usage of some form of digital technology inspires better levels of originality and creativity in classroom activities. This shifts away from centralized teaching toward personalized instruction, which has the extra benefit of providing flexibility and convenience in addition to a potentially more engaging educational experience for students.

Digital Technology for Enhancing Instruction

The research conducted by Xiong et al., (2021) focuses on China's timely advancement in online education and its launch of university MOOCs internationally during the height of the worsening COVID-19 pandemic in early 2020. More specifically, the study investigates the country's preparedness, its implementation, and its impact on the pandemic. The usage of a variety of digital-based technology, according to ESL teachers, has helped to strengthen her education and has made it more effective. ESL teachers used a variety of concrete examples to back up their claim in order to prove their point. Language learning software is increasingly being recommended by ESL teachers in order to assist students in developing a higher level of competency. In addition, a significant number of students have poor listening skills, which makes it difficult for them to achieve the outcomes that are expected of them. The teachers of

students learning English as a second language (ESL) have found that using language software helps them improve their listening abilities as well. Students learning English as a second language (ESL) are often encouraged by their teachers to change the language setting on their mobile devices to English. Teachers of English as a second language (ESL) have also reported that VOA (Voice of America) Special English is excellent and useful, and that it assists students in enhancing their grasp of spoken English and English grammar. For students who are interested in dubbing film clips, ESL teachers often propose using dubbing software as an innovative way to the process. Students who have difficulty pronouncing words will benefit from this as well. Some students have expressed interest in reading periodicals written in a foreign language. Reading software is something that ESL teachers recommend for students like them. In addition, teachers of English as a second language appreciate Xunfei English since it provides intuitively sound exercise and includes sentence follow-up reading. It is also a learning community that provides the teacher with the opportunity to form a class group.

The Bai Ci Zhan app does a good job of teaching one's vocabulary. It's interesting to note that ESL teachers often advise their students to download the Webster's Dictionary app since it's the least "technical" and, as a result, the easiest to use. In their experience, despite the fact that many of the applets are well publicized and provide a great deal of nifty features, the English-English dictionary is still the one that students use the majority of the time. ESL teachers are of the opinion that the implementation of technologies based on digital platforms is essential to the enhancement of the instructional process and have presented various examples. The first method is known as situational teaching, and it is a method in which the teacher portrays a scene, generates dynamic PPT slides, and employs the artistic appeal of music to augment the scene in order to deliver a more lively presentation. The Apple computers used by ESL teachers are equipped with a feature that enables screen navigation through the use of a mobile device. As a result, there is no longer a requirement to remain in the same location at all times, and contact with the students may take place more fluidly. The second aspect is to the participatory teaching approach, which is simply an interactive teaching application that provides students with the opportunity to learn and recall through an engaging process. The third approach is one that emphasizes learning via dialogue. Students are given the opportunity to engage in discussions with their teachers that are analogous to brainstorming about their grasp of grammatical concepts. Many ESL teachers feel that the Mini Program included in Rain Classroom is a significant contributor to the overall enhancement of the instructional process. They have gained an enthusiasm for the Mini Program that Rain Classroom offers. The use of Rain classroom helps students strengthen their independent learning skills and inventive consciousness, as well as the deployment of intelligent teaching tools, which assists in the cultivation of team spirit among students. ESL teachers also like the capabilities offered by Rain's tutoring platform, such as the classroom check-in feature, mostly due to the time-consuming nature of ensuring that all students are present in class. The attendance may be easily tallied with the use of this function, which checks people in (Xiong et al., 2021).

However, Rain Classroom does not come without its share of drawbacks. For instance, if a student arrives to class late or submits a bullet screen indicating that he or

she does not grasp a certain topic, the teacher is obligated to go over the material again. This cycle takes a significant amount of time. Because of this, the overall progression of the course may be relatively sluggish if the teacher uses Rain Classroom. ESL teachers utilize several supplementary teaching classroom approaches outside of the classroom in addition to the methods used in the classroom setting. For instance, extracurricular schoolwork is frequently delegated to be completed in a QQ group or a We-chat group. Students are required to punch a time clock in order to be controlled, which motivates them to improve their level of self-discipline. This plays a function in the process of mutual monitoring as well as the promotion of each other. Students at the institution can participate in the massive open online course (MOOC) to learn independently and at their own pace using video communication and discourse courseware. The previewing process for students can be sped up with the aid of these services. Students that take pleasure in independent study will find this to be an excellent resource. On the platform for the MOOC course, there is learning data feedback; thus, the teacher may examine the feedback data in the background to better comprehend the students' educational development (Xiong et al., 2021).

Digital Technology Impact on Students ESL learning

Recent research conducted by Jiang et al., (2022) investigates the factors that impact university students' adoption of e-learning platforms and their level of satisfaction with such platforms at the present moment in China. Teachers of English as a Second Language (ESL) believe that the digital technologies, and especially online classrooms, are extremely conducive to improved educational possibilities for their students. The majority of ESL teachers mentioned that some of their students dislike learning in the classroom setting. However, the development of intelligent teaching techniques, such as those that are usually included in digital-based technologies, increases the students' interest in learning and makes it more enjoyable for them to do so. However, they caution that students' use of some digitally-based gadgets may also push them to become more slothful. Students' access to online classroom learning has resulted in a shift in the way that teachers engage in interactive instruction with their students. Students enrolled in online programs have the ability to modify their learning experience in accordance with their own circumstances.

Students may also break the restrictions of time and location, locate resources on their own, freely pick the classes that interest them, optimize the sharing of knowledge resources, promote the fairness of education, and improve the quality of instruction through the use of online education. It was discussed among ESL teachers that, in their opinion, accelerating the transition from traditional education to self-education and education that continues throughout one's life is beneficial to the development of a society that encourages limitless and unbounded access to knowledge. The setting of an online classroom improves the overall quality of information processing for both the teachers and the students enrolled in such classes. It gives teachers the opportunity to continually improve their online teaching skills and to vary the conventional method of passing on information. However, ESL teachers were of the opinion that online education might hinder a teacher's capacity to monitor students who have poor self-control and are readily influenced by their surroundings. The use of electronic devices

for extended periods of time can lead to visual tiredness as well as myopia, which reduces one's ability to study effectively (Jiang et al., 2022)

Concurrently, after spending years in classrooms devoted to test preparation, many students may have the misconception that their teachers are the most influential people in the classroom and that their opinions carry the most weight. They depend on teachers to organize learning assignments and the substance of what they are learning. From a purely personal standpoint, June views digital technology as either a carrier or a tool. In point of fact, ESL teachers believe that the teacher is the one who eventually plays the most significant part in the learning process. The subject matter knowledge, skill, and approach to instruction of the teacher will forever remain the single most significant aspect in educational settings. People have a propensity to place an excessive amount of significance on the role that digitally based technology plays in the educational process, according to ESL teachers. According to them, the educator will always be the most important and decisive component of a successful educational experience (Jiang et al., 2022) .

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Problems with Digital-based Technologies in ESL Education

The research carried out by Zou et al (2021) shed light on the challenges that are associated with the implementation of digitally-based technology in ESL education. This study intends to draw implications for the growth of online college English education by determining the preparation levels of students and teachers for the shift to online learning and investigating the challenges they faced in this particular setting. When working with digital technology, it is impossible to avoid encountering issues of a technical nature as well as other kinds of challenges. Many teachers are of the opinion that the majority of challenges may be traced back to an excessively technical and mechanical implementation of computer-assisted education. Additionally, the process of waiting for updates or navigating patches to already-installed computer software may be laborious and even challenging. The learning process is frequently hampered as a result of these technical issues, which may be a cause of irritation for both the teachers and the students. The teachers of English as a second language (ESL) claim that their expertise on how to use computer-assisted teaching systems is inadequate, and as a result, those programs frequently produce errors. The platforms in and of themselves are not improper; nonetheless, having adequate understanding of how to utilize them is essential to making good use of them. Teachers of English as a second language (ESL) have also mentioned that the computer-assisted instruction platforms employed in their institution require constant upgrades. Even if the materials may be uploaded without much difficulty, the progression of the class will be hindered if the software platform has any hiccups.

Teachers of English as a second language (ESL) have found another, less well-known impediment to the efficient use of digitally-based instructional equipment. Teachers sometimes have a tendency to place an excessive amount of reliance on the many different technologies that offer appealing looking features, which can lead them to get complacent in their own obligations to properly educate. To be more specific, teachers may deliver instruction in a mechanistic manner in line with the courseware, which may result in passivity between teachers and students. ESL teachers have also

recognized that there are built-in challenges that result from the abilities and/or reluctance of students to use digital-based technologies, most notably the auxiliary educational platforms used at her school. This realization was made in light of the fact that there are built-in challenges that result from students' inability to use digital-based technologies. There are some students who resist using these platforms because they believe they are too stressful for them. Additionally, some students have found methods to manipulate the systems in order to achieve their goals. For instance, some students will sign in to Rain Classroom, but they will leave before the end of the lesson. In addition, it is not uncommon for students to make use of the private chat feature and spend the entirety of the class time conversing with their peers rather than paying attention to the topic at hand or the teacher (Zou et al., 2021).

Challenges Associated with Students on Digital Technology use for ESL learning

In a recent study conducted by Gao and Zhang (2020), the researchers found that teachers had clear cognitions regarding the features, advantages, and constraints of online EFL teaching. Additionally, the researchers discovered that teachers acquired information and communication technology (ICT) literacy by understanding students' learning needs, online teaching practice, and the necessity of integrating traditional classroom teaching methods into online delivery. During the epidemic, ESL teachers discovered that many students just do not enjoy the digital-based instructional approaches and prefer more conventional means of teaching and learning. These findings came as a surprise to the ESL teachers. There is a possibility that some students have not had much experience or exposure to the technology that is involved with computer-based training, and as a result, they may find it strange or even scary. This is especially true in the situation of learning at a distance online, when there may be less opportunities for human assistance. Some students do not have the knowledge and comprehension required to make good use of digital technology, which puts them at a disadvantage in comparison to their classmates who are more knowledgeable about cyberspace. For instance, some students hail from or now reside in hilly regions that are geographically isolated and feature subpar internet connections. Online courses provide a potential obstacle for them as a result. It's possible that the surroundings will have an effect on the students, too. For instance, if the connection within the family is strained, the dynamics of the situation will have an effect on their attitude toward learning when they are at home. In addition, some students could believe that online instruction is useful, but they would still like to benefit from the social relationships that come with attending school in person. These students believe that the learning environment is preferable to online learning because it provides them with the opportunity to engage in face-to-face dialogue with both their professors and their peers.

Barriers to More Effective Use of Digital-Based Instruction

The research conducted by Liang (2021) investigates university instructors' perspectives of and practices with technology, in addition to the difficulties associated with the adoption of technology. The majority of teachers of English as a second language (ESL) have confessed that they are not very skilled in the use of the numerous

computer-based platforms that are accessible to teachers. Because of this, ESL teachers make good use of their downtime by going to the gym and working on their skill sets. For instance, while using PowerPoint, ESL teachers frequently are unable to make full use of all of the features available to them. When students take part in teaching contests, they are usually required to seek guidance from their colleagues and acquaintances on how to utilize slides and incorporate them into their presentation. The Academic Affairs Office collaborates with the school's trade union to host an annual teaching competition in order to encourage teachers to continue their education and grow in their careers. The objective of the competition is to boost professional capability by actively exploring effective teaching techniques, actively engaging teachers in the process of curriculum reform, and forcefully including teachers in the process. In addition, ESL teachers reported that teaching with technology was not something that especially appealed to them. They place a greater emphasis on the planning of instructional activities and place a great deal of importance on the selection of instructional material.

The use of technology in classrooms has unquestionably had a significant effect. The teacher is required to become proficient in the use of technology, yet doing so is a time-consuming endeavor. The use of technology does not liberate human beings but, on the contrary, causes individuals to become more exhausted and frequently overburdened with labor. As an illustration, in the past, lecturers would deliver their lessons using paper notebooks, pencils, and books. They now have to prepare a large number of complicated pieces and features, all of which take a significant amount of time. They doubt that technology has had its full influence despite the fact that it has played a part.

The COVID-19 Pandemic and Digital Technology Utilization in ESL Learning

The research conducted by Li et al., (2021) was a two-fold study that initially investigated the relationship between the variables including students' academic years, genders, and academic faculties/disciplines, and their lexical proficiency. Afterwards, the researchers evaluated the effectiveness of a WeChat-assisted lexical learning (WALL) program in facilitating learning outcomes of English language vocabulary. The epidemic caused by COVID-19 has had a significant effect on the instructional strategies utilized by ESL teachers according to the study. They were first coerced into accepting new instructional technology, and the epidemic has turned them from being receptive to most digitally based technologies into an active participant in the adoption of approaches based on those technologies. When it came to participating in online training, this was especially the case. Initially, ESL teachers were opposed to making use of internet resources and techniques, but after some time had passed, they came to realize that there are certain advantages to using them. As a consequence of this, individuals have developed a greater level of comfort with online training and are maintaining their engagement with the technology. For example, even when students are now again enrolled in classes, ESL teachers still utilize messaging apps like QQ and WeChat to discuss topics with their classes. ESL teachers have adopted a new mindset in which they feel that using QQ or Wechat to generate classroom discussion is far more beneficial than having talks in person with students.

Because of the constraints imposed by the epidemic, all of the exams were completed online. For instance, the school's postgraduate re-examinations are extremely rigorous and need the use of several cameras to watch students while they take online tests. The usage of cameras was beneficial, but they were not a failsafe method. There are still methods that can be used to cheat, if certain applicants persist on doing so. In addition, there are a few significant downsides associated with taking examinations online. During the postgraduate reexamination, for instance, when the teacher reads a sentence and then asks the student to translate it, the student may not be able to hear clearly due to technical issues or because of faulty internet connections. This may occur when the teacher reads the sentence to the student and then asks the student to translate the sentence. These factors undoubtedly have an impact on the response. Teachers of English as a second language took involved in the process of retesting students and came to recognize how the online examinations can generate unfair conditions. Some applicants could be given a question that is pretty easy, and they might be able to swiftly understand the crucial information as the teacher was reading it. On the other hand, if a pupil was given a challenging question, the individual was required to pay extra close attention while listening and use extreme caution. The outcome will be badly impacted even if there is just a trace of background noise or an interruption. Therefore, the particular environmental and technological circumstances might have a significant influence on the outcomes of the tests (Li et al., 2021).

Adjusting to New Instructional Methods and their Technical Difficulties

The research conducted by Pan (2021) highlights the connections between the teaching design of oral English featuring "DingTalk + WeChat Group + FiF," which was proposed following a mining of "ideological and political elements," and the sophomore oral English course offered by the School of Foreign Studies at Guangzhou University. Traditional education consisted mostly on lecturing and reading aloud to students, with the goal of transferring as much information as possible to the young minds. Instruction in modern times encompasses a great deal more than just this. Teachers are no longer the exclusive source of knowledge for students because there is such a vast variety of materials at the students' disposal. Because of this, teachers have been needed to become familiar with new teaching strategies and to develop strategies for addressing any resulting technological challenges. The circumstances have the potential to be quite stressful. The amount of available information on the internet is nearly overwhelming. Finding the necessary resources might be a challenging task. It became difficult to select materials that were appropriate and relevant to the situation. If you have the means at your disposal, choose the appropriate platform is an absolute must. In addition to audio and video conferencing services like Ding Talk, Tencent Meeting, and Tencent Courses, there are also online education options like Rain Classroom. The live broadcast of the Rain Classroom, which is unfortunately quite choppy, should be avoided. On TikTok, there are teachers that teach a variety of foreign languages. Although July makes very little use of TikTok, the click-through rate is extremely strong. For educational purposes, TikTok is not a particularly serious site to use. Students are being

diverted from the intended academic material by an excessive number of films that are not linked to the topic at hand.

School Administrator's Support in Digital Technology Integration for ESL Teaching and Learning during the COVID-19 Pandemic

Zhu and Liu (2020) showed how the COVID-19 pandemic affected the landscape of education in China and how schools and colleges investigated long-term goals in education as a result of the pandemic's impact.The academic institution offered a first-rate and accommodating setting for both classroom instruction and scientific investigation. There are professors' laboratories, language laboratories, a room for simultaneous interpretation, a multimedia language laboratory, a digital language laboratory, a multi-function audio-visual room, multimedia network classrooms, and an electronic lesson preparation room among the resources that are available to its faculty. It has been determined that iClass should be utilized almost exclusively. After-class performance data, real-time engagement, the ability to flip the classroom, and after-class review are just some of the features that make iClass a favorite among teachers. In addition, the iWrite platform, which was developed by the Foreign Language Teaching and Research Press, was readily available to users at no cost throughout the COVID-19 epidemic. Nevertheless, the majority of the teachers in one department utilizes the website pigai.org. This resource is being utilized by a significant number of colleges all throughout China, and it is being read by a sizable number of people. In addition to these tools, some teachers also use WeChat groups to distribute teaching materials and information to their students.

Many teachers in China have disclosed and expressly mentioned that the school wants teachers to utilize the auxiliary educational platform iClass for the purposes of easy data integration. This is the case despite the fact that teachers in China employ a wide variety of digital technologies. Their classroom instruction places a significant emphasis on the use of this supplementary educational platform. According to what was found, the vast majority of teachers use pigai.org as their primary platform, despite the fact that the school does not mandate that they do so. Despite this, the lecturers mentioned that it is something that everybody knows. The hearing and speaking course for teachers is the one that features the most extensive integration with digital instructional technology. According to the teachers, it is hard for all teachers to embrace one platform because of the variety of teaching techniques, home network environments, and classes that are taught. As a consequence of this, the majority of teachers make use of a wide variety of technological tools. The majority of teachers in China have experimented with new technologies such as Zoom, Tencent Classroom, Bilibili Live, and QQ Live, and their personal preference is to learn more about these options. Teachers rely on Zoom for group lectures, and they consider the platform indispensable for leading activities involving several participants. Even though the school does not have any required regulations that must be followed by teachers, the school does ask that each teacher submit their teaching methods and identify alternate options. The school guarantees that teachers are able to perform their teaching responsibilities by gaining a knowledge of how teachers conduct their lessons. This includes keeping records of classroom assignments that are delivered and collected.

When it comes time for the final exam in the Academic Communication Writing course, the teachers will employ a centralized platform such as pigai.org as their testing environment. A significant number of lecturers make use of iClass, which was developed with features including sharing courseware and hosting forums for comments and inquiries. According to the report, teachers, along with practically all of their fellow coworkers, utilized the iClass platform during the outbreak. Unfortunately, in the case of extra-large courseware, the uploading speed of some course films is rather sluggish. This is especially true for videos that are larger than several hundred megabytes. The capacity of iClass to immediately import data pertaining to students for the purpose of viewing by teachers is one of its most useful features. More than that, the platform gives students access to all of the available classes. It might be a tedious process to organize the background data using iClass. It reduces the amount of time that may be spent connecting with kids. Because of challenges such as these, the institution actively promotes the utilization of an innovative educational platform called as Rain Classroom. This software makes it much simpler for teachers to categorize and manage student data. The vast majority of professors at the university utilize Rain Classroom, and they believe that the features of Rain Classroom are better in line with the requirements really being met by the institution.

CONCLUSION

The academic institution offered a superb and comfortable atmosphere for scientific research and instructional purposes. The faculty have access to a variety of resources, such as professors' laboratories, language laboratories, a room for simultaneous interpretation, a multimedia language laboratory, a digital language laboratory, a multi-function audio-visual room, classrooms equipped with multimedia networks, and an electronic lesson preparation room. It has been determined that the utilization of iClass is of great preference. The after-class performance data, real-time engagement, ability to flip the classroom, and after-class review that iClass delivers are just a few of the reasons why so many teachers appreciate using the platform. Additionally, during the COVID-19 epidemic, users were not charged to access the iWrite platform that was established by the Foreign Language Teaching and Research Press. Pigai.org is used by the majority of the professors in one particular division. This resource is being utilized by quite a few colleges and institutions all around China, making up a sizeable portion of the audience. In addition to these services, some teachers also use WeChat groups to communicate with students and provide instructional materials.

Many teachers in China have disclosed and expressly mentioned based on the reviewed literature that the school wants teachers to utilize the auxiliary educational platform iClass for the purpose of easy data integration. This is the case despite the fact that teachers in China employ a wide spectrum of digital technologies. This supplementary instructional platform is a primary focal point in their classroom instruction experience. It was found that the majority of teachers use pigai.org as their primary platform, despite the fact that using it is not mandated by the school. However, the teachers said that it is something that is known by everyone. The hearing and

speaking course for teachers is the one that integrates with digital-based instructional technology the most closely. According to the teachers, it is hard for every teacher to use a single platform because of the wide variety of teaching techniques, home network environments, and programs that are offered. As a result of this, the majority of teachers make use of a wide variety of technological tools. The majority of teachers in China have personal preferences for experimenting with new technologies such as Zoom, Tencent Classroom, Bilibili Live, and QQ Live, all of which they have used at some point. Teachers rely on Zoom for group lectures, and many consider the software an absolute need for leading group activities. The school does not impose any required regulations on teachers, but it does ask that each teacher submit their teaching methods and identify alternate ways of doing things. The school guarantees that teachers are able to accomplish all of their teaching responsibilities by first gaining a knowledge of how teachers conduct their lessons. This involves maintaining records of classroom assignments that are delivered and collected. When it comes time for the professors to administer the final exam for the Academic Communication Writing course, they employ a centralized platform such as pigai.org. Many teachers now utilize iClass, which was developed with features including the ability to transmit courseware and host forums for inquiries and debates. According to the report, teachers, along with practically all of their fellow coworkers, utilized the iClass platform throughout the outbreak. Unfortuitously, the uploading speed of some course videos can be rather sluggish, particularly those with a size more than several hundred gigabytes. The potential of iClass to immediately import data pertaining to students, which can then be seen by teachers, is a time-saving feature. Additionally, students get access to all of the courses through the platform. The process of organizing the history data on iClass might be arduous. It cuts down on the amount of time spent dealing with kids. Because of challenges such as these, the school strongly recommends using a cutting-edge online instructional environment called Rain Classroom. The ability to filter and organize data is provided to teachers by this platform more readily. The vast majority of professors at the university utilize Rain Classroom, and they believe that its features are better in line with the requirements really being met by the institution as a whole.

REFERENCES

Bernath, U. **(2009).** Distance and e-learning in transition: Learning innovation, technology and social challenges. John Wiley.

Bitner, N., & Bitner, J. (2002). Integrating technology into the classroom: Eight keys to success. Journal of Technology and Teacher Education, 10(1), 95–100.

Bond, M. H. (ed.). (2000). The psychology of the Chinese people in English learning. Oxford University Press.

Cabanatan, P. (2003). Integrating pedagogy and technology: The SEAMEO INNOTECH Experience. Presentation to experts meeting on teachers/facilitators training in technology pedagogy integration, Bangkok, Thailand, 18–20 June.

Chen, H. Y. (2005). Computer Mediated Communication: The Use of CMC to Develop EFL Learners' Communication Competence. The Asian EFL Journal 7(1).

Chen, L., Chen, H., & Wang, N. (2009). Distance education in China: The current state of e- Learning. Campus-Wide Information Systems, 26(2), 82-89.

Chun, D. M., & Plass, J. L. (1996). Effects of multimedia annotations on vocabulary acquisition. The Modern Language Journal, 80, 183–198.

Cohen, M. (1993). Machines for thinking: The computer's role in schools. Educational & Training Technology International, 30(1), 57–59.

Cross, J. (2004). An information history of eLearning. On the Horizon, 12 (3), 103-110.

Davidson, C., & Tomic, A. (1994). Removing computer phobia from the writing classroom. ELT Journal, 48(3), 205–213.

Fan, M., & Antle, A. N. (2020). An English language learning study with rural Chinese children Using an augmented reality App, Proceedings of the Interaction Design and Children, 385- 397.

Gangaiamaran, R., & Pasupathi, M. (2017). Review on use of mobile Apps for language learning, International Journal of Applied Engineering Research, 12(21), 11242-11251.

Gao, L. X., & Zhang, L. J. (2020). Teacher Learning in Difficult Times: Examining Foreign Language Teachers' Cognitions About Online Teaching to Tide Over COVID-19. Frontiers in psychology, 11, 549653. https://doi.org/10.3389/fpsyg.2020.549653

Guo. X. (2014). The English Learning Based on the Network Environment. Foreign Language Learning, 2014 (1).

Hamidi, F., Meshkat, M., Rezaee, M., & Jafari, M. (2011). Information technology in education. Procedia Computer Science, 3, 369-373.

He, K. (2013). On the Definition of Mobile Learning, [J]. Education. 2013: 17. Normal University Press.

He, X. (2015). CAI and Its Application in Rural Junior English Class. In English Language Teaching (Vol. 8, Issue 11, p. 11). Canadian Center of Science and Education. https://doi.org/10.5539/elt.v8n11p11

Hockly, N. (2013). Mobile learning. ELT Journal, 67(1), 80-84.

Hubackova, S. (2015). History and perspectives of eLearning. Procedia - Social and Behavioral Sciences, 191, 1187-1190.

Jauregi, K. & Banados, E. (2008). Virtual interaction through video-web communication: A step towards enriching and internationalizing language learning programs. European Association for Computer Assisted Language Learning, 20(2), 183-207.

Jiang, H., Islam, A. Y. M. A., Gu, X., Spector, J. M., & Chen, S. (2022). Technology-Enabled E-Learning Platforms in Chinese Higher Education During the Pandemic Age of COVID-19. SAGE Open, 12(2). https://doi.org/10.1177/21582440221095085

Klimova, B. (2018). Mobile Phones and/or smartphones and their Apps for teaching English as a foreign language, Education and Information Technologies, 23, 1091-1099.

Li, B. (2021). Ready for Online? Exploring EFL Teachers' ICT Acceptance and ICT Literacy During COVID-19 in Mainland China. In Journal of Educational Computing Research (Vol. 60, Issue 1, pp. 196–219). SAGE Publications. https://doi.org/10.1177/07356331211028934

Li, F., Fan, S., Wang, Y., & Lu, J. (2021). Chinese University Students' Experience of WeChat-Based English-Language Vocabulary Learning. In Education Sciences (Vol. 11, Issue 9, p. 554). MDPI AG. https://doi.org/10.3390/educsci11090554

Li, L., & Walsh, S. (2010). Technology uptake in Chinese EFL classes. Language Teaching Research, 15(1), 99–125.

Liang, W. (2021). University teachers' technology integration in teaching English as a foreign language: evidence from a case study in mainland China. In SN Social Sciences (Vol. 1, Issue 8). Springer Science and Business Media LLC. https://doi.org/10.1007/s43545-021-00223-5

Matthew, K. (1997). A comparison of the influence of interactive CD-ROM storybooks and traditional print storybooks on reading comprehension. Journal of Research on Technology in Education, 29(3), 263.

Md Ali, A., & Richardson, J. (2012). Web interactive multimedia technology: Implementation from two perspectives. International Journal of New Computer Architectures and Their Applications, 2(1), 154.

Nakata, T. (2011). Computer-assisted second language vocabulary learning in a paired-associate paradigm: A critical investigation of flashcard software. Computer Assisted Language Learning, 24(1), 17-38.

Nunan, D. (1989). Designing tasks for the communicative classroom. Cambridge University Press.

Pan, J. (2021). An Online Teaching Design of Oral English against COVID-19: An

"Ideological-and-Political-Theories-Education-in-All-Courses" Perspective. In English Language Teaching (Vol. 14, Issue 9, p. 39). Canadian Center of Science and Education. https://doi.org/10.5539/elt.v14n9p39

Sandholitz, J. H. Ringstaff, C. & Dwyer, D. C. (2000). Teaching with Technology: Creating Student-centered Classrooms. Teachers College Press.

Shoffner, M., De Oliveira, L., & Angus, R. (2010). Multiliteracies in the secondary English classroom: Becoming literate in the 21st century. English Teaching-Practice and Critique, 9(3), 75-89.

Thorne, S. L., & Payne, J. S. (2005). Evolutionary trajectories, internetmediated expression, and language education. CALICO Journal, 371–397.

Tong, Q. (2014). On modern technology and its effects on education. Teaching Practice and Research. Eastern China University Press.

Tsegay, S. M., Ashraf, M. A., Perveen, S., & Zegergish, M. Z. (2022). Online Teaching during COVID-19 Pandemic: Teachers' Experiences from a Chinese University. In Sustainability (Vol. 14, Issue 1, p. 568). MDPI AG. https://doi.org/10.3390/su14010568

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. Language Teaching, 31(2), 57–71.

Wright, S., & Zheng, L. (2018). English in Chinese higher education: Past difficulties, current initiatives and future challenges. University of Portsmouth.

Wroblewski, G. (2013). "Using Computer-based Flashcards to Introduce and Review New Vocabulary." The Language Teacher 37/i: 32-33.

Zhang W. (2022). The Role of Technology-Based Education and Teacher Professional Development in English as a Foreign Language Classes. Frontiers in psychology, 13, 910315. https://doi.org/10.3389/fpsyg.2022.910315

Zhong, Y. X., & Shen, H. Z. (2002). Where is the technology-induced pedagogy? Snapshots from two multimedia EFL classrooms. British Journal of Educational Technology, 33(1), 39–52.

Zhu, X., & Liu, J. (2020). Education in and After Covid-19: Immediate Responses and Long-Term Visions. In Postdigital Science and Education (Vol. 2, Issue 3, pp. 695–699). Springer Science and Business Media LLC. https://doi.org/10.1007/s42438-020-00126-3

Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COVID-19 pandemic: Student and teacher readiness, challenges and implications. In D. Zou (Ed.), PLOS ONE (Vol. 16, Issue 10, p. e0258137). Public Library of Science (PLoS). https://doi.org/10.1371/journal.pone.0258137