CHAPTER II

LITERATURE REVIEW

2.1 Information and Communication Technology (ICT)

The application of information and communication technologies (ICT) in the classroom is not a new phenomenon for the education system; nonetheless, this practice has advanced quite quickly over the past few years. According to Wang and Woo (2007, page 149), information and communications technologies (ICT) are essential tools. These tools can take the form of hardware, such as computers, projectors, and digital cameras, as well as software, such as Microsoft Word, PowerPoint, and other similar programs. Kent and Facer, 2004 in Fu (2013) suggested that a school is an important place in which kids engage in a broad range of computer activities, while the home serves as a supplementary location for regular engagement in a more limited set of computer activities. ICT is increasingly being utilized effectively in instruction, learning, and assessment. ICT is seen as a potent instrument for educational change and reform.

Access to education is typically increased by the use of ICT. The advent of ICT has made it possible for education to take place at any time and in any location. For instance, students have around-the-clock access to course materials they find online. The use of teleconferencing in the classroom facilitates two-way communication between the instructor and the students. With the use of ICT, classes don't have to rely just on books to convey their

lessons. Video clips, audio noises, graphic presentations, and so on all contribute to the wealth of information available on the Internet. The development of information technology, such as the Web, brings the history of educational technology into a new groove. Online services for both degree and non-degree education mainly provide educational services to customers using the Internet as a medium. Online services can have different steps like enrollment, passing a test, making a payment, learning, case assignments, case discussions, tests, evaluations, talks, and declarations. No matter how good other ideas are about using ICT to help learning in school, it could be a must if the school in this country isn't too out of control to have a future that allows for using ICT to help learning. Here are some of those ideas:

1. Electronic Book

   E-book, or electronic book, is a digital file comprising a body of text and images that can be sent electronically and displayed on-screen similarly to a printed book. E-book is one that employs computer technology to deliver interactive media content in a compact and dynamic format. The information presented in an e-book is richer than in a traditional book since e-format books allow for the coordination of impressions such as sound, design, graphics, liveliness, and movies. The single type of electronic book represents a possible negligible trade of paper books for their digital representation on a computer screen. The conversion of traditional books into their electronic equivalents, which are then shown on a computer, is considered to be the sole purpose of the

e-book format. Because of this advancement, it is now possible to store hundreds of books in a single piece of sturdy circular / CD" or" compact disc (capacity of roughly 700MB), DVD or advanced flexible disc"(capacity 4.7 to 8.5 GB), and "flash" (as of now accessible capacity up to 16 GB). Reference books like Britannica and Microsoft Encarta, which are in interactive media, are more complicated and need more detailed plans. Interactive media structure lets e-books give not only written information, but also sound, pictures, videos, and other mixed media.

2. E-Learning

Online learning is another name for e-learning. E-learning is any kind of formal or informal learning that takes place over an information network, like the Internet, a local area network (LAN), or an extranet (WAN). E-portfolios, cyber infrastructures, digital libraries, and online learning object repositories are just some of the parts. All of the above parts work together to give the user a digital identity and connect all the people involved in education. It also makes research between different fields easier. Most of the time, the term "online learning" is used to refer to the process of education that involves the use of the Internet. According to a broader definition of e-learning given in the SEAMOLEC working paper, it is any form of education that makes use of electronic administrations. Despite the fact that e-learning has been defined in a variety of ways, most people agree that it involves the acquisition of

knowledge through the medium of electronic innovation. E-learning could be seen as fitting into the larger category of instructional media broadcasts on television and radio. Even while radio and education could be a form of e-learning, it is generally agreed that e-learning reaches its peak form only after it combines with online technology.

The "website" is the medium through which learning materials are presented in their most elementary form in "web-based" or "Internet-based" education. By employing this method, students can utilize the teaching aids provided by the lecturers or facilitators whenever they see fit. If it's deemed necessary, the educational website will also provide a mailing list for its users to communicate with one another. A computer program or learning management system (LMS) is a rare piece of software that provides "complete" E-learning facilities (learning administration framework). Web-based, LMS software that is currently operating and available from any location with an internet connection. The company's offerings include student/learner management, material/learning management, assessment/counting management, and student/facilitator communication management.

This office makes it possible for learning activities to be supervised even when parties don't meet face-to-face (chairmen, facilitators, learners or learners). "Presence" means that the people involved talk to each other through email, a chat channel, or a video conference. People of all ages and places use information and

communication technology every day, so learning about it has become a must. The adaptability of the innovation makes a difference in going to a more important task and achieving a better result in education, a professional career, and social relationships, where its use may be a major requirement.

ICT which stands for Information and Communication Technology is elaborated as follows:

1. According to Shore in Hartoyo (2012:2), information refers to the handled data in a substantial and deliberate fashion.
2. Potts defines communication as the act of preparing to distribute and transmit meaning in the service of establishing mutual understanding. According to Brown (2011), communication is defined as the dissemination of information from one person to another, regardless of whether or not that information inspires conviction. However, the information being passed around must make sense to the recipient.
3. The word "technology" comes from the Greek "techno" (meaning "strategy," "craft," or "aptitude") and "logos" (meaning "science"). Thus, originality might be understood as the rational documentation of some form of expertise.

According to the definitions of the three subcomponents, information and communication technology (ICT) as a whole can be described as the application of technology to support the effort of transmitting data and communicating, particularly within the context of

educational settings. The method makes use of computerized innovations for the majority of electronic data-handling innovations, such as computers, the internet, portable phones, systems, broadband, and other similar innovations.

2.2 ICT Devices in Language Context

Some examples of ICTs that are frequently encountered in linguistic context include:

1. Interactive multimedia

   Interactive media, often known as interactive multimedia, is any computer-delivered electronic system that enables the user to control, combine, and alter various media types, such as text, sound, video, computer graphics, and animation. Internet, telecommunications, and interactive digital television are all examples of possible components of the digital environment (Finney, 2011:2).

2. Computer

   Online learning and research are two examples of how computers can be put to good use. Students can use the internet to get resources for their projects and assignments, as well as to get feedback and advice from other researchers as they store and arrange their research materials digitally. The computer serves its primary function as an electronic medium of language acquisition whether it is used in conjunction with other multimedia learning devices or as a standalone (typical) device. According to the Oxford English Dictionary, a computer is "an electronic

device that is capable of receiving information (data) and performing a sequence of logical operations in accordance with a predetermined but variable set of procedural instruction" (program), with the output being more information or signals. It consists of a central processing unit, a display screen, a keyboard, and additional devices.

3. Audio devices

In order to create an interactive multimedia experience, audio devices, and other media can be combined. On the other hand, it may also be utilized alone as a standalone instrument. Audio equipment consists of things like speakers, headphones, CD players, and so on.

4. Internet

Through email, the World Wide Web, text, audio, and video conferencing, the Internet can be utilized as a tool for language acquisition.

5. Television

According to the Oxford dictionary, television is a system that turns pictures and sounds into electrical signals, sends them by radio or other means, and shows them on a screen.

6. Telephone

Due to the low quality of analog transmissions, the telephone as a medium for language instruction has not seen widespread adoption. On the other hand, there is a new invention of digital quality that has a cheaper connection cost and has the potential for use in conference calls.

7. Mobile gadget

Mobile electronics, such as cell phones and smartphones, can function in much the same way as miniature versions of personal computers since they come preloaded with computer-like software. Everyone would be able to enjoy conversing, browsing, and discussing each other with a wider range of topics if they used this device and connected to the internet using it. Because of advancements in science and technology, the size and cost of these devices are shrinking, making them more affordable and within reach of more people.

8. Social interface

This medium offers a facility or an example that makes it possible for humans and computers to engage with one another. Through the use of writing, speech, touch, eye motions, and other gestures, people are able to set up more interactions with computers in a way that is more intuitive and requires less work. (Hartoyo,2012:34) This technology represents a significant step forward in the development of recently emerging fields such as interactive multimedia, audio-graphic computer teleconferences, and interactive television delivered over satellite (National Broadband of Employment, Education, and Training, 1993:5).

9. Interactive whiteboard

An interactive whiteboard also referred to as an IWB, is a big interactive display (similar to a monitor with a touch screen) that is linked to a computer and a projector. The desktop of the computer is

projected onto the surface of the board, and users control the computer by moving a pen, their finger, or one of a number of different input devices.

2.3 Current Application of ICT in English language teaching and learning

Information and communication technology (ICT) refer to any equipment whose principal function is to ease the flow of information and communication. It is not necessary for information transmission to occur directly between the communicator and the communicant for it to be successful. Due to advancements in information and communication technology (ICT), the communication process between a communicator and a communicant can now be presented in straightforward ways. They can communicate via a variety of channels, including the telephone, internet, e-mail, satellite, television, and video conferencing. The process of language acquisition is comparable to that of communication. There is an interaction between the instructor and the student during the language acquisition process. The teacher and students need not be physically present in the same room or place for the learning process to be effective. For instance, teachers may utilize the Internet to instruct their students, assign them assignments, or offer them additional knowledge.

When it comes to learning a new language, information and communication technologies (ICT) play a crucial role as the "medium" that facilitates the learning process by allowing for direct connection between students and teachers even when they are not in the same physical location at

the same time. It is possible to design a language-learning program that provides students with additional context, explanation, or instruction as they work through the sessions. Technology-assisted language learning as a manual. A computer can accurately store an infinite number of lessons or references that can be retrieved at any time from any location. Fitzpatrick and Davies (2002), cited in Hartoyo (2012), list seven uses of ICT in language acquisition, namely:

1. Presentation

   Students of a language need to be exposed to a variety of resources, including written texts, audio recordings, and video recordings. A well-presented lesson is an effective tool for fostering student comprehension.

2. Practice

   Technology allows for the provision of a range of workout types, with presenting stimulus comprising text, audio, and video in a variety of permutations. The use of ICT also allows for the analysis of student replies and the provision of relevant feedback (Hartoyo, 2012:40).

3. Authoring

   Based on Hartoyo's ideas (2012:40) when teachers use ICT to help students learn a language, they can either buy ready-made materials or make their own using a variety of authoring tools.

4. Computer-Aided Assessment (CAA)

The use of CAA (computer-aided assessment) is becoming increasingly significant in the field of second language education. After students have completed a course, they are tested and their comprehension is evaluated using this medium.

5. Publishing

There are information and communication technology (ICT) tools available to assist educators and students in posting or linking their work in a local area network. Both instructors and students can benefit from the usage of ICT for publishing purposes by doing so in the following ways:

- Word – processors, and Desk Top Publishing (DTP) software
- Doing audio recording and editing tools to record interviews, discussions, learning material and etc.
- Using digital cameras and camcorders to record presentations, drama, role play, and so on.
- PowerPoint can be used as the medium to publish presentations.
- Web pages using web authoring tools.

6. Communications

Learners and teachers can communicate with one another more easily thanks to technology. Email, which enables language learners to communicate with "web pals" in other countries; Tandem learning; computer-mediated discussion; web-based learning environment; audio

conferencing; and Video Conferencing are some examples of ICT tools that can be used as a medium of communication. Email is one of the most common forms of electronic communication.

7. Simulations

The computer has the potential to serve as a catalyst that sparks analytical and critical thinking, as well as discussion and writing. Stimuli that come in the form of programs that incorporate simulations are very helpful. The following are some examples of activities that can be used for language learning that "simulate" real-world tasks: 1) Web Quest; 2) Action Mazes; 3) Adventure Games; 4) Sunpower; 5) Expodisc; 6) "Real-life" Simulations; and 7) Video Conferences.

2.4 Advantages of ICT for Teaching-Learning English

Fu (2013) claimed that the literature has lauded the advantages of using ICT in the classroom. Evidence suggests that utilizing ICT can:

1. Help students find digital information in a quick and effective way.

ICT is utilized as a tool for students to find learning topics, solve difficulties, and provide answers to the problems in the learning process, as mentioned by Brush, Glazewski, and Hew (2008) in Fu (2013). Knowledge is easier to acquire with the help of ICT, and students are more engaged in their studies when they are actively using ICT to apply what they have learned.

2. Support student-centered and self-directed learning

According to a recent study, students are increasingly using computers for authentic learning purposes (Castro Sánchez and Alemán 2011, cited in Fu 2013). They generate fresh understanding by seeking out, filtering, categorizing, and analyzing existing facts and information. As a result of their ICT-based education, students are better equipped to evaluate the credibility of information presented to them and apply their knowledge in new contexts.

3. Develop an innovative learning environment

The use of ICT fosters students' growth in their knowledge across disciplines (Chai, Koh, and Tsai 2010 in Fu 2013). The use of ICT allows for the development of more original responses to various learning inquiries. In a reading class, for instance, electronic books are frequently utilized for read-aloud assignments. Computers, laptops, PDAs, and iPads give students easy access to a wide variety of text kinds and reading levels. A reading-aloud interface, appropriate vocabulary-building activities, games connected to reading abilities and vocabulary development, and more may be included in these e-books through the use of reading software. As a result, ICT involves the use of custom-built programs that offer novel approaches to satisfying a range of educational requirements.

4. Promoting collaborative learning in a distance-learning environment

According to Koc (2005) cited in Fu (2013), students can use ICT to collaborate on projects, share information, and communicate from any location. In a teleconferencing classroom, for instance, students from all

over the world can participate in a roundtable discussion on the same topic at the same time. They may get the chance to think critically, conduct research, and formulate original ideas and theories. They might go on to assess the efficacy of digital education tools. In order to express themselves and reflect on their education, students not only learn together but also share their varied learning experiences with one another.

5. Incorporate more chances for higher-order (critical) thinking development.

   Research by McMahon (2009) cited by Fu (2013) found that students who used ICT while studying also improved their ability to think critically. More time spent in the realm of information and communication technologies has been shown to improve pupils' capacity for critical thinking. Therefore, it is highly recommended that schools implement widespread technological integration across all subject areas and grade levels. In settings where this is implemented, students use technology to acquire specialized forms of knowledge in a variety of learning environments.

6. Improve teaching and learning quality

   Self-direction, competence, and originality are the three cornerstones of high-caliber ICT-based instruction and learning. When students are given the freedom to make their own decisions about how and when they learn, we call this autonomy. Through these experiences, individuals develop the skills necessary to operate effectively in both

individual and group settings. They can learn to effectively apply and share knowledge while utilizing cutting-edge tools. The use of ICT has been shown to improve pupils' imaginative capacities. Through media like video games, audio CDs, and television, they may become exposed to new forms of multimedia production and develop their own skills in these areas. Using ICT effectively requires a blend of student initiative, competence, and originality to boost the standard of instruction and student achievement.

7. Support learning by allowing access to course materials

Students have more time to investigate beyond the mechanics of the course content thanks to ICT, which allows them to better understand the concepts being taught. The link between teaching and learning is also altered as a result of the use of ICT.

2.5 Disadvantages of ICT in Learning EFL

According to Kolbakova (2014), "using ICT in the classroom may necessitate a great deal of extra work and effort from teachers in order to meet the needs of every single student, because ICT is not suitable for all learners in all situations and for all purposes, and may necessitate a substantial amount of learner training for effective use."

There were also issues with class control, interruptions, and a tendency for students to employ abbreviations in their work. According to Yunus et al. (2013, p. 1), "it was also discovered that teachers are often weak at managing

problems and arranging activities including the use of ICT in the ESL writing classroom."

2.6 Challenges in Using ICT

It's a fact that in today's technology world, individuals use a variety of media, including social networks, blogs, and television, to keep themselves informed and educated. Specifically, the use of information and communication technologies (ICT) in the classroom creates numerous possibilities for improving the instruction itself. It has also shifted the focus of education from a top-down model to a more bottom-up, communicative, and collaborative approach, where students take the lead in completing assignments and activities on their own. Although ICT plays an important part in education, there are still certain obstacles to implementing technology when teaching English as a second language. It's possible that these obstacles have to do with the faculty or the administration. Then, the teachers are confronted with a number of problems in terms of the integration of ICT, which affected the frequency with which ICT was used. These challenges include a lack of expertise, facilities, time, and technical support. The information that follows will describe the obstacles that educators face when trying to integrate ICT:

1. Lack of Time

   Due to the requirements of presenting valuable learning materials through ICT, a shortage of time inevitably develops as one of the barriers that teachers must overcome. Although there are a lot of resources available on the internet, it was not easy to construct technologically-

assisted instructional materials. The curricular standards must be reflected in the materials they deliver, and they must be comprehensive enough to meet the requirements of all pupils. Also, educators must use their imaginations to come up with engaging and relevant lesson plans and readings. Since teachers require extra time to get ready for incorporating ICT into the classroom, this means less time spent actually teaching and more time spent planning for and implementing ICT.

Teachers also had little time to engage with technology because they had to spend much of their time instructing. Teachers have also expressed a desire for additional time in which to familiarize themselves with and create technology-based instructional resources for their classrooms. After that, the teachers added that they don't have enough time to incorporate ICT into their daily teaching activities because using ICT takes more time, including time to prepare lessons and resources, time to explore and practice using technology devices, time to handle technical problems, and time to receive adequate training. Teachers struggled with time management issues when it came to preparing and integrating ICT devices into the classroom setting because of their other responsibilities.

2. Lack of Professional Development

Another aspect that affects the efficacy of incorporating ICT throughout the teaching and learning activities, especially in the context of English language instruction, is teachers' comfort with the use of technology. Regular professional development opportunities for educators

are necessary if they are to maintain and improve their ICT skills. When it came to training, they were just shown the basics of how to operate the various pieces of IT hardware and software available to them. Rarely was there any kind of formalized training for using technology in the classroom when teaching English as a second language. The onus is on educators to choose and implement suitable hardware or software. For this reason, some educators may stick to tried-and-true methods of instruction rather than incorporating ICT into the classroom. Because there are so many resources available online, videos have become a popular tool for educators to employ in the classroom. Moreover, most educators only used basic technological tools, deploying all prepared material in the English laboratory. Additionally, as they continue to learn and explore all facts regarding ICT, their passion for it will undoubtedly serve as an important component of their competence in integrating ICT.

3. Lack of Facilities

Teachers still had issues with ICT facilities such lack of physical resources, poor quality resources, and limited access to ICT. Teachers noticed too few laptops and other gadgets to teach English. low-quality hardware and software. Teachers used antiquated equipment and lesson materials since the lab was constructed several years ago. Hard and soft devices sometimes failed. After a while, the teachers learned how to solve all the issues. ICT deployment is also linked to electricity access, which could prevent it. Teachers' inadequate ICT access affected their ICT

integration, specifically their ability to prepare before teaching and learning. Due to other pupils studying in the English lab, teachers have limited access to its ICT gear. Thus, teachers sometimes struggled to forecast unexpected events during ICT integration, which hampered teaching and learning. However, when teachers could easily access the English laboratory and its equipment, they could better deliver learning materials and anticipate potential impediments.

4. Lack of Technical Support

Schools must provide instructors with technical assistance to help them better incorporate ICT into their lessons. It is well recognized that a person who does not comprehend the complexities of technological gadgets runs the risk of damaging them. The technology used in English-speaking classrooms and labs may be unfamiliar to some educators. The curriculum, however, mandates that they use it in their classrooms. Not only must educators be competent in deploying the devices, but they must also be adept at troubleshooting any technical issues that may arise. When educators are unable to resolve issues on their own, they require a reliable support system. Unfortunately, some schools do not offer teachers the necessary technical support to successfully integrate ICT into the classroom. Most schools rely only on computer teachers and other teachers with specialized computer knowledge. Then, a few educators commented on how they are hesitant to implement ICT in their classrooms because of the difficulty in obtaining assistance in the event of technical difficulties.

5. Lack of Competence and Confidence

The teachers' apparent lack of experience with the electronic equipment was cited as a major source of difficulty. It's related to how comfortable teachers feel using ICT to provide lesson plans. Those issues, however, were exclusive to those classrooms whose teachers lacked the skills necessary to make effective use of technological tools. In addition, this is also heavily impacted by the age of the instructors. Teachers did not believe that ICT integration was feasible in the classroom, hence they were unable to effectively include it into their lessons. Teachers reported that getting students to pay attention during lessons was challenging when they had to work on ICT. The teachers would be unable to communicate with their students and assist them through the learning process.

2.7 Previous Studies

1. Paudel, P. (2021). Information and communication technology in foreign language classes in English: Roles and practices.

   The purpose of this study was to evaluate the roles and practices of information and communication technologies (ICTs) in English as a Foreign Language (EFL) classes in Nepal. This earlier research highlighted teachers' perspectives on the significance of ICTs in secondary English education, the specific ICT tools employed, and the level of emphasis on their use. Even though they were skeptical about how ICTs would help students develop their creative and critical thinking skills, most teachers were positive about the importance of ICTs in language

instruction. Even though the teachers used ICTs in their classes, they were hesitant to use new ICT tools and applications. The results imply that instructors should get training on how to use ICT to improve their skills, knowledge, and confidence so that they can get the most out of it. In terms of researching teachers' perceptions of ICT practices, this study is comparable to the current one. The current study, however, will also look into the barriers that the teacher encountered when implementing ICT in the teaching and learning process.

2. Muslem et al (2018) Perceptions and Barriers to ICT Use Among English Teachers in Indonesia.

   In terms of EFL research objectives, this research and the current research are similar in that both investigate teachers' barriers in using ICT. The goal of this study is to evaluate the perceptions and challenges of English teachers about the deployment of ICT in ELT courses. This study employed both qualitative and quantitative methodologies. Using qualitative and quantitative techniques, the data were analyzed and interpreted. Based on the results, English teachers thought that ICT was very useful in the classroom. But the teachers who used ICT had trouble since they didn't have enough time or money, their Internet connection was slow, and they didn't know much about ICT or how to use it. The results of this study give policymakers important information on how ICT is being used to educate and learn in classrooms.

3. Khaled Mofawiz Alfawaz et al, (2018) The Role of Information and Communications Technology (ICT)

   The goals of this research are to (1) understand how ICT has contributed to the evolution of English language teaching (ELT); (2) learn how teachers perceive the ways in which ICT has enhanced teaching practices in the classroom; (3) determine the obstacles that prevent teachers from effectively incorporating ICT into their lessons; and (4) evaluate the extent to which ICT has contributed to the growth of ELT. In this study, researchers used a descriptive approach. According to the collected data, ICT plays major roles in the teaching process and provides the following benefits: valuable teaching materials, as instruments for teaching purposes, reduced teaching anxiety, assistance in monitoring student activities, assistance in class administration, and time and effort savings. In addition, participants indicated an interest in and a willingness to use ICT in their teaching process, as well as the ICT skills necessary to implement ICT-integrated activities successfully in their classrooms. However, a large number of students in the classroom and the paucity of ICT-related training and workshops posed the greatest obstacles to the integration of ICT into teaching practices. This research is related to the current research in terms of obstacles or challenges and the implemented ICT in the English language teaching and learning process.

4. Akhy, K. B. and Iswari, W.P. (2021). Information Communication Technology in EFL Classroom.

Even in Morocco, where English is not the official language, ICT has made its way into classrooms to help students learn the language. However, its effectiveness needs to be enhanced because of several challenges encountered in its deployment. The goal of this study is to investigate the possibilities of information and communication technologies (ICT) in English as a foreign language (EFL) classrooms in Morocco and offer suggestions for getting instructors ready to use these technologies effectively in their lessons. Possibilities include discussing what kinds of multimedia materials are available, how to make the best use of them, and how information and communication technology (ICT) can be used to help students improve their command of the English language. Teachers have a crucial role in the classroom and should receive continuing education in the use of technology in teaching. This previous study assists researchers in identifying distinct ICT types that are valuable and appropriate to use in English Foreign language teaching. This makes the previous research highly relevant to the present study.

5. Hashemi, A. & Kew, S.N. (2021). The barriers to the use of ICT in English language teaching: a systematic literature review.

   This research contributes to the literature by identifying a number of factors that may account for instructors' reluctance to use ICT in their lessons on the English language. To identify the challenges associated with incorporating ICT into ESL classrooms, 33 scholarly articles were analyzed. The results of the review indicate that (i) instructors' lack of

confidence in using technology, (ii) a lack of proper training, and (iii) a lack of time are the most prevalent barriers to the use of ICT in English language instruction.

6. Zadtyi, H., Petrus, I., & Vianty, M. (2021). EFL teachers' capability and barriers in using information and communication technology (ICT).

   Using questionnaires, in-person interviews, and supplementary data from the field, this study employed a descriptive qualitative research strategy. The data gathered from the surveys, interviews, and observations were reported. Participants were English as a Foreign Language teachers from Sanga desa's senior high schools. The results of the study Teachers are rated as having above-average skills, and they report that a lack of resources, time, training, and an unstable internet connection are their biggest challenges. The study's overarching goal is to provide light on teachers' capacity for, and resistance to, enhancing the quality of ICT use in future English classrooms. This study makes a substantial contribution to the literature in terms of the teachers' expertise in implementing ICT in their teaching and learning, as well as the challenges they have encountered when using it.

7. Hadijah, S., and Shalawati. (2017). Investigating Teachers' Barriers to ICT (Information Communication Technology) Integration in Teaching English at Senior High Schools in Pekanbaru.

   Many educators around the world are using basic or cutting-edge technological items to address the growing number of problems associated

with the efficient application of ICT (Information and Communication Technology) in English language classrooms. Still, there are unavoidable obstacles that reduce the efficiency of ICT integration in the classroom. This paper presents the results of a study into the challenges English instructors in Pekanbaru's senior high schools have when attempting to include ICT in their lessons. Descriptive research methods were used in this investigation of the obstacles to incorporating ICT into EFL classrooms, and both qualitative and quantitative methods were utilized. Fourteen teachers at Pekanbaru's senior high schools were given questionnaires, and open-ended interviews were conducted with each of them to learn more about the challenges they've had while trying to implement ICT. The results also showed that instructors had problems with things like getting their hands on ICT, making the time to do so, receiving adequate professional development, and getting adequate technical assistance. Therefore, these interconnected obstacles imply that educators should be given ample encouragement and resources to make use of ICT in the classroom. This research adds to what is already known about the challenges that teachers have with ICT, which is a topic that is important to the researcher.

8. Saputri, S. W., Fajri, R.D., & Qonaatun A. (2019). Implementation of ICT in Teaching and Learning English.

   The fast progress of information and communication technologies in the modern period has impacted many facets of contemporary society. One

place where this has an impact is in the classroom. The state's investment in education technology research and development has significantly improved the quality of today's educational system. This research aims to quantify the extent to which information and communications technology (ICT) is being incorporated into the educational process, with a focus on English classes. Furthermore, this study intends to investigate the advantages and disadvantages experienced by English teachers which is good to know as the additional literature contribution.

It can be compared to the research being conducted by this study in relation to those previous studies. This investigation reveals that there are disparities. One of them is the scope of the research subject, as this study sampled English teachers from junior high schools in the Banjarnegara region. As a result, the disparities in the conditions of teachers who have received training are not distributed fairly. This motivates and justifies the conduct of this investigation.