

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ENGLISH SPECIFIC PURPOSE (ESP) INSTRUCTION IN ENGLISH CLASS OF PHYSICS AND CHEMISTRY STUDY PROGRAM

¹Putri Nurhayati, ²Novita Triana

Universitas Lambung Mangkurat, Banjarmasin, Indonesia

¹rudinderifit@gmail.com; ²novita_triana@ulm.ac.id

Abstract: The use of Information and Communication Technology (ICT) in teaching and learning process has an important role as a tool to support the learning process on this era. The use of ICT also involved in English for Specific Purpose instruction (ESP). This research aims to investigate the kind of ICT applied and how they are used, the advantages, and also to discover the challenges faced by the lecturer in using ICT in English class of Physics and Chemistry Study Program of Lambung Mangkurat University. Descriptive qualitative method used in this study. Observation and interview used to collect the data. The subject of this study was a lecturer who teaches English in Physics and Chemistry Study Program of Faculty of Teacher Training and Education in Lambung Mangkurat University. The study found the types of ICT used in the lecture were (1) hardware, namely a laptop, projector, speaker, and smartphone, and (2) software, namely Microsoft Office (PowerPoint), Quizizz, WhatsApp, and a learning management system (SIMARI). The advantages of the used ICT in English teaching and learning include increased student engagement, efficient time management, enhanced motivation, and active student participation, contributing to a more dynamic and effective learning environment. Some obstacles that found namely, lack of time to prepare ICT-based teachings due to the lecturer's internal time management factors, unstable internet connection and limited internet quotas for students. Teachers can use applications like Padlet, Duolingo, and TED talks to enhance English learning skills. However, they must monitor and evaluate ICT usage, paying attention to students' responses, technical difficulties, and learning objectives. To overcome network constraints, time management, and limited internet quotas, lecturers can provide offline resources, government subsidies, and cooperate with service providers. ICT Usage Planning and preparing materials in advance maximize time usage and avoid lost valuable time.

Keywords: Advantages, challenges, ESP, ICT

INTRODUCTION

Chopin (2019) defines ESP refers to the instruction and acquisition of English as a second or foreign language, with a focus on specific purposes. This approach differs from other pedagogical techniques, concentrates on the specific needs of target learners. ESP is an approach to teaching English as a second language or foreign language for special fields and studies according to the needs of students to support certain professions or activities. English teaching and learning with a special purpose made or held according to the needs of the learner. A crucial aspect of ESP program is its customized approach to the learning objectives and curriculum, which is made to meet the individual needs of each student. The language, skills and types of English language work that learners must complete in relation to specific English language tasks are the subject of ESP courses (Paltridge & Starfield, 2012).

English for Specific Purposes is often compared to English for General Purposes (EGP). The latter refers to the teaching of English as a second language is taught alongside other subjects for educational purposes focusing on providing students with foundation for the future (Kaosar, 2014). In this type of instruction, students usually do not need to communicate in English immediately. In contrast, ESP refers to the teaching of English to specialized learners for specific vocational and educational purposes. ESP emphasizes communicative competence and designs instruction to the students' needs (Tahir, 2009).

Furthermore, there are some distinctions between teaching ESP and teaching EGP in terms of the learners and the purposes. ESP students are typically adults who already have basic understanding of English and have purpose to acquire the language in order to perform specific job-related functions. Meanwhile, EGP students are those of all ages that study English for very general purposes or to adapt to an English-speaking country. In terms of the purposes of instruction, ESP is an approach that is conducted to meet the specific needs of the students, while EGP aims to enhance overall English proficiency by developing various language skills (reading, writing, speaking, listening) and language components (vocabulary, grammar, pronunciation). Therefore, the curriculum for ESP is designed based on an evaluation of the specific purposes, requirements, and functions that are required for English proficiency.

Additionally, rather than focusing only on language structure, ESP emphasizes the use of language in context. It covers various fields, such as accounting, computer science, tourism, and business administration. ESP emphasizes that English is not taught as isolated subject independent from the real world context or the aspirations of students; instead, it is integrated into an essential subject for the students. In GE instruction, in fact, all four language skills (listening, speaking, reading and writing) are emphasized. In ESP, however, a needs analysis determines which language skills are most important for students, and the curriculum is designed accordingly. For example, a student in an ESP program may focus on the development of writing skills in business administration. A student who wants to become a tour guide may benefit from an ESP program that fosters the development of their oral communication skills (Rahman, 2015). Although ESP is different from EGP in some ways, in this era of 4.0 it shares similarities. That is, it cannot be separated from the use of Information and Communication Technology (ICT).

According to Ratheeswari (2018) ICT is the technologies that make information accessible by using telecommunication. It is closely related to Information Technology (IT) but primarily concentrates on communication technology, which combines computer hardware and high-powered communication networks to transmit files, data, video, and audio. This network is referred to as the internet. According to Anderson and Glend (2003) ICT is any technology used to gather, manipulate, present, or communicate information. It involves hardware, software, communication tools, and even video conferencing capabilities.

Furthermore, Ammanni and Aparanjani (2016) mentioned that Computer Assisted Language Learning (CALL) using CD-ROMS and other applications, the internet, webinars, mobile apps for devices such as laptops and smartphones, i-Pads, and i-Pods, as well as

tablets, speakers, overhead projector, and PowerPoint slides can be used in English language teaching and learning as parts of ICT. Those ICT applications and devices can help teachers in delivering and providing attractive material for students. Students can also be more interested and motivated to engage in the learning process in the classroom. Particularly in the Faculty of Teacher Training and Education, Lambung Mangkurat University, the use of ICT in teaching and learning involves SIMARI (Sistem informasi Universitas Lambung Mangkurat Ter Integrasi). It is a platform for all ULM Information System applications where the lecturers and students interact online. The lecturers can give some materials such as video or E-book that students need in a particular course, open question and answer section, make a quiz and discussion in real time with students, for example, lecturers make discussion section through message or internet relay chat in SIMARI. Meanwhile, the students can download the learning materials, answer and ask questions, do the quizzes, and discuss the learning materials with other students. In addition, the internet-based learning platforms may have other features such as, a page to monitor students' attendance and scores.

Several studies have been conducted to investigate the use of ICT in the teaching and learning ESP. These studies also suggest that teachers must be able to use ICT because when teachers are digitally capable and trained to use ICT, they can enhance students' thinking skills, provide them with innovative and personalized means to articulate their comprehension, and equip them to address persistent societal and occupational challenges. Hoesny et al. (2020) in their study on the use of Edmodo in ESP Classroom found out that there are several advantages of using the application. For example, Edmodo fostered a collaborative learning environment, thereby facilitating the enhancement of students' collaborative competencies. It also encourages students to be more disciplined in their task completion and to develop responsibility. Nevertheless, some disadvantages were also found. For example, Edmodo requires an internet connection in order to function, which necessitates a Wi-Fi or data connection. Unfortunately, the Wi-Fi connection provided is inadequate, especially for the students' use. Students are required to pay more for data packages in order to compensate for this limitation. In addition, the application sometimes experiences delays in response preventing students from to submit queries, comments, or participate in discussions on time. Another study from Hirata & Hirata (2012) found that LMS-based distance learning has been an important learning tool in ESP courses. An LMS enables institutions to share educational resources with students, and enhance students' independent learning ability. Most teachers and students in this study were reported to have positive attitudes towards the LMS.

Furthermore, the benefits of using ICT in teaching and learning English are numerous, such as the increase of students' motivation and connection with knowledge in a more meaningful way. ICT can help students improve their ability and develop advanced cognitive abilities like understanding, reasoning, problem-solving, and creative thinking. A study conducted by Rintaningrum (2019) showed that involving technology in language teaching and learning makes the class up to date and lives. Besides that, the result of the

study explained that using ICT in teaching can improve students' reading comprehension, listening, speaking, and writing skills. In addition, according to Alkamel and Chouthaiwale (2018) ICT motivates students to study English and improves teachers' ability to convey knowledge to students.

Through ICT, there are also several possibilities for students to utilize English in a variety of contexts. Al-Kamel et al. (2018) acknowledged that language learning is a challenging task, and ICT can greatly facilitate the process for students. All four English language skills (listening, speaking, reading and writing) can be taught and learned through utilizing any of the ICT platforms (radio and television, films, blogs, Skype, mobile phones, and YouTube). In addition, Ojoo (2022) found in his study that technology and the internet in particular provide language learners the possibility to use the language in authentic circumstances in meaningful ways. Meaningful ways refer to where students understand and learn more easily because the teacher is able to make learning easier for students and, therefore, they can easily relate experiences or knowledge that already exists in their minds. Students can also use the internet to provide easy and quick access to up- to-date and authentic language materials designed to motivate language them. Despite the benefits and advantages, there are some challenges in the use of ICT in teaching and learning English in general. Research conducted by Simangunsong et al. (2020) to 180 junior high school teachers showed that some challenges in using ICT are, among others, schools not having sufficient ICT facilities, and teachers' lack of training in the use and ways to integrate ICT into their already established lesson plans and teaching methods. Moreover, some of the obstacles are internal, such as the teachers' lack of self- confidence and interest in ICT. Another previous study on challenges in using ICT conducted by Aminullah et al. (2019) Some schools lacked adequate ICT facilities to support the teaching and learning activities of the instructors, and some did not have optimal regulations regarding the use of ICT, particularly for the English subject.

Considering the above discussion on the teaching of ESP and the benefits as well as the challenges of ICT in the instruction of English, this study is conducted to investigate the use of ICT in ESP classes of Physics Education Study Program and Chemistry Education Study Program of Education and Teacher Training Faculty of Lambung Mangkurat University. Specifically, the aim of this study is to find out kind of ICT and how they are used, advantages and challenges faced by the lecturer in using ICT.

LITERATURE REVIEW

English for Specific Purposes (ESP) is a specialized method of teaching and learning the English language that is aimed at addressing the specific needs and objectives of students in a given professional, academic, or occupational setting. According to Evans and Tony (1998) Absolute ESP characteristics are ESP is focused on the language related to all these activities in terms of grammar, lexis, register, study skills, discourse, and genre, is tailored to the specific requirements of the learner, and employs the methodologies and practices of

the disciplines it supports. In addition, based on Evans and John (1998) in Paltridge and Starfield (2018) ESP has variable characteristics, namely; ESP, or English for Specific Purposes, is often tailored to particular fields of study or professions. As a result, ESP may employ distinct pedagogical approaches in comparison to general English instruction. Typically, ESP is intended for adult learners, who may be pursuing higher education or working in a professional capacity. Notwithstanding, it is plausible that the target audience for ESP materials is secondary school learners, although such materials are typically tailored for intermediate or advanced students. It is generally assumed that ESP courses presuppose a foundational understanding of the language systems. ESP has traditionally been divided into two major branches, English for Academic Purposes or EAP and English for Occupation or EOP. EAP refers to any English teaching relevant to academic research needs. EOP is part of ESP which aims to give students knowledge and skills in English relevant to a particular job or vocation.

At Lambung Mangkurat University, especially at the Faculty of Teacher Training and Education, there are 22 education study programs. This ESP teaching is found at the first and second semester levels, namely the English I course. The focus of this research focuses on Physics and Chemistry education study programs. Where ESP teaching is in semester one and two. English I classes in Physics and Chemistry education study programs are combined into one large class. English classes in physics and chemistry education study programs are conducted every Thursday.

Based on UNESCO (2005) the term Information and Communication Technologies (ICT) pertains to technological tools utilized for the purpose of transmitting, storing, generating, disseminating, and interchanging information. The comprehensive scope of ICT encompasses a diverse range of technologies, including but not limited to television, radio, DVD, video, satellite systems, fixed and mobile telephones, computer and network hardware and software, as well as the associated equipment and services, such as video conferencing and electronic mail. In general, ICT use relates to “the utilization of computing devices, such as desktop computers, laptops, software, or the Internet, for the purpose of instruction” (Hew & Brush, 2007, p. 225). However, it explicitly relates to how teachers utilize technology to plan and deliver lessons as well as how students use it as a learning tool (Inan & Lowther, 2010). There are benefits in the use of technology namely, the appropriate utilization of technology in the classroom has the potential to enhance instructional delivery, engage students, and save time (Sandra Stroo, 2018). Furthermore, the utilization of information, communication, and technology (ICT) has the potential to enhance the quality of higher education instruction and academic research. Various forms of technology can provide students with a wealth of information simultaneously (Apriani and Hidayah, 2019).

There have been some studies on the use of ICT in ESP instruction Kurková, Kuera, and Vydrová (2014) investigated how a Moodle learning management system (LMS) could be used to teach business English. The findings showed that students in the online ESP course improved in their listening ability. The LMS and the online course were viewed favorably by the students. Shahani and Biria (2016) indicated that using PowerPoint to teach ESP

materials may enhance students' reading skills and increase their comprehension of the topics.

METHOD

This study used a descriptive qualitative method in which the researcher tried to describe in a clear and systematic manner the research activities carried out with respect to a specific subject (Sukardi, 2021). The subject of this study was a lecturer who teaches English in Physics and Chemistry Study Program of Faculty of teacher training and education in Lambung Mangkurat University. The lecturer is a female, 31 years old and has been teaching ESP at Lambung Mangkurat University for five years.

Observation sheets and interview guidelines were used in this research as instruments to collect the data. This study used observations to find out the process of using information and communication technology used during the learning process. In order to validate the data found in the observation activities interview technique was performed.

To analyze the data, the researcher used a qualitative approach. Qualitative approach is a method that frequently employs analysis. More emphasis is placed on process and meaning (subject perspective) in qualitative study. The theoretical foundation functions as a guide to ensure that the study is centered on field-specific facts.

FINDINGS AND DISCUSSION

The presentation of the research data is divided into three sections: types of ICT used and how they were used, benefits of using ICT, and challenges in using ICT in the learning and teaching processes in English classes of Physics and Chemistry Education study programs.

Kinds of ICT and how they were used in physics & chemistry study programs

Anderson and Glend (2003) defines information and Communication Technology (ICT) as follows.

ICT generally relates to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information. The technologies could include hardware e.g., computers and others devices, software applications, and connectivity e.g., access to the internet, local networking infrastructure, and video conferencing. They also explain that ICT is used to access, collect, present and communicate information.

Based on the findings that the researcher found in observation, ICT was used by the lecturer to aid the learning process. The ICT used varied as well, namely several hardware devices, such as laptops, speakers, LCD projectors, and smartphones. The lecturer also utilized some software, such as WhatsApp and Quizizz. Table I summarizes the hardware and software used by the lecturer.

Table 1. ICT used by the lecturer of English in English class of Physics and Chemistry study program

Hardware	Software
Laptop, speaker, smartphone, LCD projector	Microsoft office (PowerPoint), Quizizz, WhatsApp and learning management system (SIMARI)

Laptop, LCD projector, and speaker used during the learning process. Laptop and LCD projector used as tools to display learning materials in class. The learning material was presented in the form of a slide presentation using Microsoft Office PowerPoint. The laptop was used as the presentation source, i.e., the Microsoft Office PowerPoint software, and the laptop was not only used to run the slide presentation file but also to control the presentation process, for example, selecting the next slide. Using an LCD projector, the PowerPoint presentation slides were projected from the laptop onto the wall at the front of the classroom. Laptop and LCD projector used in the introduction when the lecturer provided a game in the form of a picture guessing game for warming up activities at the beginning of learning and main activities in which she displayed a reading text and task instructions for students in the classroom.

Not only did the lecturer use a laptop and LCD Projector in delivering her materials, the students also utilized the tools during the teaching and learning process. Grimes And Warschauer (2008) noted four positive changes that occurred in classrooms in using laptops described under the labels writing, information literacy, and multimedia skills, and autonomy. According to Thamarana (2017) students agree that the LCD projector is a valuable instructional tool for English. Students used laptops to create creative PowerPoint slide presentations for group assignments. Then, the results of group discussions were presented in front of the class using an LCD projector as an image projection tool. In addition, (Dashtestani, 2014) contended that students exhibited favorable dispositions towards incorporating laptops into their language learning practices. A loudspeaker was also used during the learning process. The loudspeakers were used by the lecturer as a tool to deliver materials or instructions in the classroom. Not only that, students also used the loud speaker for presentation activities in the classroom. The reason why loudspeakers were used in the teaching-learning process was because the class was large with more than 50 students. By using the loudspeakers, the voice could reach the entire classroom so that students could listen clearly to what was uttered.

Additionally, a smartphone was used by the lecturer as a tool to share materials, discuss and communicate with students. Through smartphones, students could download the materials and do the tasks. The previous study on the use of Smartphones in learning English language skills showed that the participants had favorable attitudes toward the use of

mobile in education. The participants' responses indicated that smartphone use can facilitate the learning process and inspire students to be positive in the classroom (Ta'amneh, 2021).

Furthermore, the software used during the English learning process were Microsoft Office (PowerPoint), Quizizz, and WhatsApp application. In its implementation, PowerPoint was used as a tool to be used by the lecturer to display learning materials and task instructions. Not only that, it was also used to provide interesting learning materials and images for students. Animations and images were integrated to make PowerPoint presentations more interactive. Students used PowerPoint to create presentation slides. Steele & Johnson (2012) noted that using PowerPoint's big screen enables all learners (at the front and back of the class) to see what is being introduced. They contend that, when used appropriately, it can enhance the teacher's instruction and learners' motivation.

Furthermore, Quizizz occasionally used to check students' understanding of previously learned material and brainstorming. Due to the large size of the class, the instructor has opted to utilize Quizizz as a means of assessing student comprehension, as it is not feasible to individually evaluate each student. The kinds of assessment given by the lecturer through Quizizz were in the forms of multiple choice and true or false. Based on Rahayu and Purnawarman (2019) Students were able to conduct self-assessment as a consequence of their ability to identify their strengths and weaknesses, as prompted by Quizizz: take the first quiz, receive feedback, review, replay the quiz, and then take the second quiz. The majority of students demonstrated significant growth in their comprehension of grammar, as evidenced by their increasing scores on three tests. Besides using Quizizz as the software, the lecturer also used the WhatsApp application as a tool to share learning materials during the learning process. The types of materials that were shared through the WhatsApp application were reading texts and their reading comprehension exercises.

Additionally, the lecturer employed SIMARI throughout the teaching and learning processes. SIMARI is a learning management system provided by Lambung Mangkurat University. It serves as a platform for all ULM Information System applications and allows for online interaction between lecturers and students. The lecturer posted some learning materials or exercises on SIMARI, and the students would download learning materials, fill out attendance lists independently, and send assignments and many other educational features. Moreover, SIMARI was used to find out the students' attendance. Attendance was filled independently by students in SIMARI. The lecturer sets the attendance time that can be accessed by students from the start to the end of class hours. According to Dashtestani and Stojković (2015) using a learning management system (LMS) can improve the quality of ESP instruction and the listening comprehension of students. The data of observation was relevant to the data of the interview. In the interview the lecturer said:

I often use e-learning (SIMARI) which has been designed by the university for access to which can also be easily accessed by students, in addition to e-learning I also use games at the beginning for warming activities. When checking understanding with questions I

use quizzes', for its tools, namely PowerPoint, WhatsApp to share material or answers and discussions.

In addition, the lecturer said:

For the hardware used are a laptop, speaker and LCD projector, while for the software used when teaching is Microsoft Office (PowerPoint) and Quizizz.

In line with the study by Prasanea (2017) this study discovered that using ICT - hardware, software, or both allowed students to do more about their learning activities and easily understand the learning materials presented.

Advantages of utilizing ICT in physics & chemistry study programs

The use of ICT in the English teaching and learning process certainly has advantages. Based on the results of observation conducted by the researcher, there are advantages in using information and communication technology.

Firstly, observation data shows success in the learning implementation using ICT aspect. The use of Microsoft Office (PowerPoint), which was displayed in the classroom using a hardware projector, made students more actively involved in the classroom because they could all see the learning materials clearly. Being able to see the learning materials clearly was very important since the number of students was large that is, about fifty-four students in one large room. (Gier and Kreiner, 2009), as cited in Samia (2019), mentioned that information retention increases when students use PowerPoint presentations to actively engage in class. Moreover, Hafis (2013) stated that PowerPoint slides were advantageous because it might foster interactive dialogue and interaction, which would help students' grades. There was a collaborative effort between the teacher and the students to make the teaching and learning process more engaging, fun, and relaxing by using Microsoft Office (Power Point). During the observation activities carried out by the researcher, the PowerPoint presented in the classroom is interactive with animated images and attractive PowerPoint templates, so that the PowerPoint can involve students in the classroom and learning becomes more fun and relaxed.

Secondly, to share the learning materials the lecturer used WhatsApp application. it made the distribution of learning materials became more effective and efficient. All students could access the learning materials at the same time. Rahim (2011) mentioned that ICT has become one of the most widely used learning media in various fields of education due to the effective use of ICT and the principles of efficiency, optimization, fun and creativity. Based on the observation, the lecturer did not have to walk around the class to distribute the learning materials to the students. Moreover, she even could share the material while not in the class. This was important regarding the size of the class which was not small.

Thirdly, in giving task assignments the lecture used Quizizz. The students participated in the quiz using smartphone devices. They took the quiz by entering a unique game code provided by the lecture, and then they could answer the questions on Quizizz. As the students answered the questions, they would receive immediate feedback on their

performance, including correct answers and their progress. Therefore, the lecturer did not need to take a lot of time to correct and to know the students' grades because the grades appear automatically on the app. Quizizz makes learning fun and interactive by incorporating gamification elements such as leaderboards and competition features. According to Amalia (2020) students have expressed their agreement with the notion that Quizizz is an enjoyable learning tool. Additionally, it has been observed that the implementation of Quizizz in classroom settings has resulted in a competitive environment during exams, while also mitigating the possibility of cheating. Furthermore, the results indicate that Quizizz has demonstrated greater success compared to conventional formative assessments. This approach facilitates the active engagement of students in the process of acquiring knowledge.

The observation results are also supported by data findings through interview activities to confirm the data. The lecturer said:

There are some advantages, such as; it can boost students' motivation since we can create fun and attractive learning, Easy to use, paperless and Efficient in terms of time management in classroom.

The lecturer perceived it can improve students' motivation since the lecturer can create exciting and attractive learning. In line with Peterová, N (2017) stated that the use of ICT in the classroom is a required as it makes the classroom more interesting and learning more successful. Moreover Keshtiarast et al., (2021) state ICT integration in ESP offers benefits like facilitating student interactions, facilitating easier student collaboration, developing independence, motivation, and higher-order thinking skills in ESP learning, making ESP learning more manageable, and supplying authentic materials from their major. In addition, the lecturer stated that ICT is easy to use, paperless and efficient in terms of time management in the classroom.

Challenges in utilizing ICT in physics & chemistry study program

Despite the advantages of using ICT in the ESP class of Physics and Chemistry study program of Lambung Mangkurat University, there are some challenges in the use of ICT. The network, which is occasionally unstable, is the only challenge that researchers had discovered during observation activity. In other types of ICT such as PowerPoint, laptops, LCD projectors, and speakers, the researcher did not find any significant challenge.

To confirm and add specific information about the challenges to the use of ICT, the lecturer stated that the challenges that occur can come from internal and external factors. Internal factors are factors that come from the lecturer, such as time management in preparing materials and using ICT during the learning process, while external factors are factors that are beyond the lecturer's control, such as unstable internet networks and student internet quota. The lecturer said:

There are several challenges faced in using ICT during the learning process, of course, these challenges can come from internal factors and external factors. The internal factor

itself is my time management as a lecturer in using ICT, while for external factors such as unstable internet connection and limited student quota.

Regarding the problems in unstable network connections and limited student internet quotas Khan & Kuddus (2020) mentioned that several challenges to practical implementation of ICT in classrooms were poor connectivity, infrastructure issues and lack of time to prepare lessons involving ICT. Although some challenges might disrupt the teaching and learning process, the lecturer prepared materials at the beginning of the semester, for unstable network, the lecturer used her personal internet quota or by tethering hotspot with other devices, avoiding the use of WIFI available in the faculty while in the class. This also applied to limited student's internet quota, students used hotspot tethering with their friends' smartphones.

CONCLUSION AND SUGGESTION

This study investigated the kinds of ICT used by the lecturer in English class of Physics and Chemistry Study Program of Lambung Mangkurat University, the advantages and challenges in the implementation. This study concluded that the kinds of ICT used by the lecture were divided into (1) hardware, that is, laptop, projector, speaker, and smartphone, and (2) software, namely Microsoft Office (PowerPoint), Quizizz, WhatsApp dan learning management system (SIMARI). The use of ICT provided the lecturer with some advantages in handling the ESP class. First, ICT makes students more engaged in the classroom to learn English. Second, effective in terms of time management in the classroom, simple to use, and paperless. Third, it can increase students' motivation. Fourth, the implementation of ICT in the English teaching and learning process makes students more actively participate in the learning process. Nevertheless, the use of ICT in this ESP class also presented some challenges, that is, first, the lack of time to prepare lessons involving ICT, this is based on the lecturer's internal factors regarding time management. Second, challenges from the external, such as; unstable internet connection and the limited internet quota owned by students.

Teachers and lecturers can use interesting applications or websites in the English learning process such as Padlet for writing skills, Duolingo to increase reading skills, and English podcasts such as TED talks to hone students' listening skills. Although ICT has advantages, yet lecturers or teachers need to monitor and evaluate the use of ICT during teaching and learning. Pay attention to students' responses to ICT tools or resources, whether there are technical difficulties and the degree to which learning objectives are achieved. This will help lecturers or teachers adapt and face obstacles in using ICT. In overcoming unstable network constraints, time management and limited student internet quota, lecturers or teachers can provide offline learning resources, provide quota subsidies that can be obtained from the government and cooperate with quota service providers. Teachers can utilize ICT Usage Planning for time management, and they must prepare learning materials and resources related to ICT usage in advance. By preparing effectively,

teachers can maximize the use of time and avoid losing valuable time browsing for or arranging materials at the right time.

REFERENCES

- Al-Kamel, M., Chouthaiwale, S. S., & Adulkareem Alkamel, M. A. (2018). *The positive Effect of ICT on the English Language Learning and Teaching*. <https://www.researchgate.net/publication/329572075>
- Alhafeez Ali Ta'amneh, M. A. (2021). The Use of Smartphones in Learning English Language Skills: A Study of University Students' Perspectives. *International Journal of Applied Linguistics and English Literature*, 10(1), 1. <https://doi.org/10.7575/aiac.ijalel.v.10n.1p.1>
- Aminullah, A., Loeneto, B. A., & Vianty, M. (2019). Teachers' Attitudes and Problems of Using ICT In Teaching EFL. *English Review: Journal of English Education*, 8(1), 147. <https://doi.org/10.25134/erjee.v8i1.2324>
- Amalia, D. F. (2020). Quizizz Website as an Online Assessment for English Teaching and Learning: Students' Perspectives. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, 7(1), 1. <https://doi.org/10.33394/jo-elt.v7i1.2638>
- Anderson, J. & Glenn, A. (2003). *Building capacity of teachers' facilitators in technology- pedagogy integration for improved teaching and learning: final report*. Bangkok: UNESCO, Asia and Pacific Regional Bureau for Education. Retrieved from: www.unescobkk.org/fileadmin/user_upload/ict/ebook/ICTBuilding_capacity/BuildingCapacity.pdf
- Apriani, E., & Hidayah, J. (2019). The ICT Used by the English Lecturers for Non-English Study Program Students at STAIN Curup. *Vision: Journal for Language and Foreign Language Learning*, 8(1), 26–37. <https://doi.org/10.21580/vjv8i13280>
- Dashtestani, R., & Stojković, N. (2015). *The Journal Of Teaching English For The Use Of Technology In English For Specific Purposes (Esp) Instruction: A Literature Review. In Specific And Academic Purposes (Vol. 3)*.
- Dashtestani, Reza. (2014) *The Use of Laptops for Learning English as a Foreign Language (EFL): Merits, Challenges, and Current Practices*. TESOL International Journal Volume 9 Issue 1.
- Frankel & Wallen. (2011). *How to design and Evaluate Research In education. Eight editions*. New York: The Mac Grow Hill.
- Grimes, D., & Warschauer, M. (2008). Learning with laptops: A multi-method case study. *Journal of Educational Computing Research*, 38(3), 305–332. <https://doi.org/10.2190/EC.38.3.d>
- Hoesny, M. U., Cahyani, H., & Aziz, I. N. (2020). *The Use of Edmodo In ESP Classroom: A Study On Students' Perception And Classroom Activities*. *JOLLT Journal of Languages and Language Teaching*, 8(3), 237. <https://doi.org/10.33394/jollt.v%vi%i.2602>
- Hutchinson T & Waters A. (1987). *English for specific purposes*. New York: Cambridge University Press.

- Hirata, Y., & Hirata, Y. (2012). *Learning management system: Japanese student perceptions and expectations*. In K.C. Li, F.L. Wang, K.S. Yuen, S.K.S. Cheung, & R. Kwan (Ed.), *Engaging learners through emerging technologies* (pp. 11-24). Springer Berlin Heidelberg.
- Hafis, M. (2013). *Students' Perceptions of The Use of PowerPoint Slide Show For Teaching English Subject*. <https://doi.org/10.31571/bahasa.v2i2.244>
- Kaosar Ahmed, M. (2014). *The Power of Sisterhood in Selina Hossain's Ghumkature Ishwar View project Looking with A Critical Lens View project*. *Elt Voices-India International Journal For Teachers Of English Issues In Esp (English For Specific Purposes) Elt Voices-India* (Vol. 4) Online. <https://www.researchgate.net/publication/281345103>
- Keshtiarast, B., Salehi, H., Tabatabaei, O., & Baharlooei, R. (2021). *ICT Comes to ESP Course: Iranian Students and Teachers' Perceptions of ICT Integration into ESP Instruction*. *Research in English Language Pedagogy*, 9(2) 283–308. <https://doi.org/10.30486/relp.2021.1912762.1233>
- Khan, N. M., & Kuddus, K. (2020). *Integrating ICT in English language teaching in Bangladesh: teachers' perceptions and challenges*. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 12(5). <https://doi.org/10.21659/RUPKATHA.V12N5.RIOCIS23NI>
- Ojoo, S. Y. (2022). *The Use of ICT for the Teaching and Learning of English as a Second Language in Nigeria: The "What", "Why", and "How."* *South Asian Research Journal of Arts, Language and Literature*, 4(4), 144–148. <https://doi.org/10.36346/sarjall.2022.v04i04.004>
- Paltridge, Brian., & Starfield, S. (2012). *The handbook of English for specific purposes*. UK: John Wiley & Sons.
- Prasanea, J. T. (2017). *The use of Information and Communication Technology in English Classes at Vocational High Schools in Ambon*. Paper presented at International Seminar on Language, Education, and Culture, Malang, Indonesia. Retrieved from: http://sastra.um.ac.id/wpcontent/uploads/2017/11/110-115-Joke-ThabitaPasanea_edited_LAYOUTED.pdf
- Ratheeswari, K. (2018). *Recent Trend of Teaching Methods in Education" Organised by Sri Sai Bharath College of Education Dindigul-624710*. *India Journal of Applied and Advanced Research*, 2018(3), 45–47. <https://doi.org/10.21839/jaar.2018.v3SI.169>
- Rahman, M. (2015). *English for Specific Purposes (ESP): A Holistic Review*. *Universal Journal of Educational Research*, 3(1), 24–31. <https://doi.org/10.13189/ujer.2015.030104>
- Rintaningrum, R. (2019). *what can we learn from ICT users in English Language Teaching and Learning: Lecturers' view*. *iNELLTAL Conference*, (p. 192). East Java.
- Sandra Stroo, R. M.-L.-N. (2018). *Using Technology in the Teaching of ESP: .* In R. Muñoz- Luna, *Integrating Information and communication technologies in English Spesific Purposes* (p. 36). Malaga: Springer Nature.
- Sukardi. (2003). *Metodologi Penelitian Pendidikan (Kompetensi dan Praktiknya)*. Jakarta: Bumi Aksara.
- Sugiono. (2011). *Metode penelitian kuantitaif, kualitatif, dan R&D cetakan ke.9 Bandung: Alfabeta*.

- Simangunsong , W., Rahman, F., & Derin, T. (2020). *ICT Usage in Teaching English in Pekanbaru: Exploring Junior High School Teachers' Problems*. *International Journal of Advanced Science and Technology*, 29(03), 5052–5063
- Sinta, I., Rahayu, D., & Purnawarman, P. (2019). *The Use of Quizizz in Improving Students' Grammar Understanding through Self-Assessment*.
- Steele, S & Johnson, J. (n.d). PowerPoint in the classroom. Retrieved 25th May 2012 from <http://www.tiger.towson.edu/users/sstee12/researchpaper.htm>
- Tahir, Mizel M. (2009). *English For Specific Purposes (Esp) And Syllabus Design*.
- Thamarana, S., & Scholar, R. (2017). *Teachers' Attitude towards the Use of ICTs in English Language Teaching: A Survey Use Of ICT And Multimedia In Teaching Writing Skills In English Language: An Experimental Study View project A Study on Multimedia Technologies for Effective English Language Teaching View project Teachers' Attitude towards the Use of ICTs in English Language Teaching: A Survey*.
<https://www.researchgate.net/publication/314696093>