

## **ICT Integration in The English Learning Context for The Higher Education Students: Potencies and Issues**

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### **ABSTRACT**

Information and communication technology (ICT) exists as a new trend in English language teaching and learning for recent years. This study aimed to explore the potencies and issues to the use of ICT in English language learning process. A descriptive qualitative research method was used to find out the phenomena of the use of ICT in an English language course for one semester. Sixty-three higher education students at a Health Polytechnic in Jayapura were the sample of this research. The data of this research were collected from questionnaire and Interview. The findings indicated that students have adequate knowledge about ICT tools and the use in English language learning activities. ICT has high potencies to be applied and developed due to its roles, benefits and students' attitudes toward the implementation of ICT in English class. Students gain the positive impact of using ICT both in offline and online English Class. The implementation of ICT in English teaching and learning process can improve English competency, promote the learning motivation, and provide variety in learning process, and flexibility in time and place. On the other hand, some factors such as the lack of ICT literacy, incompatibility of ICT Tools, cost, and error of internet connection become the challenges that diminish the efficacy of ICT deployment in the English learning process.

**Keywords:** ICT; English Language Learning; Higher Education Students.

### **INTRODUCTION**

In the era of modern society, digital technology plays crucial roles in everyday human's life. Technology is believed to bring abundant advantages that help people to complete various tasks in more practical, effective and efficient ways. The Information and communication technology (ICT) has been used massively in education sector. Asabere and Enguah in Wijayanti et al, (2023) defined ICT as the technological devices and resources used as the communication tool and be able to create, process, disseminate, and store diverse information, including text, pictures, sounds, video, etc. The education practitioners: teachers and lectures are promoted to integrate the ICT in the teaching and learning activities both in and outside the classroom setting to generate innovation and improvement in education

environment, quality, and teaching method. The implementation of ICT in learning activities is effective to create more interesting and meaningful learning atmosphere that contribute on students' success in academic. ICT assists teachers in pedagogical practices and teaching development as well as help students in learning, Bingimlas (2009).

Information and communication technology (ICT) has undoubtedly brought enlightening innovation and positive effects in English language teaching and learning for couple of years. Utami et al, (2019) suggests that applying the ICT in English language context is beneficial to develop the teaching and learning quality. It can be employed by the English teachers as teaching medium to develop students' English skills (Apriani, 2017). According to Melor (2007), ICT provides the students with wider learning opportunities and experiences to English language acquisition and mastery. To support the effective English teaching and learning activities, teachers or students can select two types of ICT, namely web-based and non-web-based, according to its purposes. The web-based ICT requires Internet connection to be accessed. It consists of numerous digital learning applications and platforms such as WA, telegram, email, YouTube, google classroom, google meet, zoom meeting, LMS, Kahoot, and other learning sites and sources that can be accessed via web browser. The non-web-based ICT is internet free including the media such as language lab, television, computer, films, videos, recordings, overhead projector, etc.

The use of ICT, particularly the web-based exploded in early 2020 when the world faced the covid-19 pandemic. It significantly transforms the education in Indonesia from traditional (face to face meeting) to online system by using numerous learning applications and platforms digitally. Today, when the pandemic is not being a threat anymore, ICT keeps being teachers' choice to be integrated in the teaching and learning process, both offline and online. English teachers are demanded to have adequate competency and creativity when using the ICT in EFL activities to help students gaining their English proficiency. Several roles of ICT that can be applied by the teachers including to design the English instructions, search and deliver the learning materials, administer assessment and evaluation (Wijayanti et all, 2023). For instance, instead of explaining the materials orally by themselves, teachers can combine it through different ways such as using text, pictures, graphics, or videos. ICT is useful to facilitate various kinds of online learning and conferencing that enable teachers and students meet in virtual reality forum. The use of Google meet, zoom meeting etc, helps teachers to transfer the knowledge and information, do presentation with the students, or students with their peers although they are in distance (Melor, Lubis and Lin, 2009). Teaching English using ICT is essential to develop students' English skills and competency (Apriani and Hidayah, 2019). It enhances students listening, reading, speaking, and writing achievement, as well as develops the vocabulary and grammar knowledge because students are exposed with various authentic online materials (Wang and Cheng, 2019). ICT facilitates students more opportunities to learn English everytime and everywhere. It changes the teacher-centered approach to learner-centered approach

(Utami et al, 2021) in which teachers are not always as the sources of knowledge and information in the English learning activities. Teachers take the role as the facilitators that guide students in learning by providing learning audio or video files, sharing the website links, creating online learning group discussions, and training students' English competency by using technology (Hadijah and Shalawati, 2017). In another hand, students can learn English individually using their ICT tools and applications. There are number of learning websites that students can access freely. On their time of self-study activities, students can search the materials, improve the English skills, vocabulary, and grammar through online practices. Besides, students can download and store the English learning sources like dictionary, e-books, games, videos, and recordings in their gadgets (mobile phones, laptop, and computer) which they can learn later. ICT supports the English language teaching and learning activities with wider potencies, and offer learning environment in more interesting, communicative, authentic, and enjoyable ways. Everybody uses technology today, yet they employ it differently depending on the level of competency, skills, and facilities to use and access it. According to Rachamalla (2021), technologies are communicative and interactive in this 21<sup>st</sup> century, but the usage is low in the language classroom due to several issues. The implementation of ICT in English language teaching and learning encounters several challenges. The external Factors include the computer, smart phones, internet connection, and lack of fund, time, and technological assistance diminishing the use of ICT, (Pairot, in Wijayanti et al, 2023). Selwyn (2003) mentioned the internal factors why the higher education students not using technology are lack of technological skill, negative perception to the use of ICT, and technophobia. In addition, the success of new technology deployment in the educational transformation requires the positive acceptance and attitude by the education actors (Woodrow,1987).

The higher education students, in this study the non-EFL students at a health polytechnic in Jayapura had conducted English course using the blended learning method. The web- based and non-web- based ICT are commonly used by the lecturers as the media in facilitating the language learning. The dynamic occurs during the implementation of ICT in English classroom due to its beneficial aspects in supporting the English language acquisition, and the barriers that students meet in the learning process. Hence, this study aims to investigate the potencies toward the use of ICT, and the barriers encountered by students in English language learning. This study which is intended to investigate the ICT potencies and challenges in the language learning is urgent to be conducted. Education in Papua is showing a better and more advanced development. The use of various ICT media is an evident of the implementation of educational transformation, particularly in the English teaching and learning context. The findings of this study are expected to extend the knowledge and information to reinforce the use of ICT in the language learning, as well as to offer solutions for the lecturers or teachers to overcome the Papuan students' difficulties in employing ICT in learning English

## **LITERATURE REVIEW**

The previous studies about the ICT usage in English language development have been accomplished by other researchers. Utami et al (2021) in research focused on investigating the use of ICT tools and barriers in English teaching found out that lecturers employed the ICT tools in different ways and purposes. The issues related to the ICT facilities, lecturers competency to the use of ICT, and different attitudes between lecturers and learners become the barriers in the ICT implementation. A study by Wijayanti et al (2023) investigating the use of ICT tools and the barriers in EFL teaching in the post-pandemic era revealed that EFL learners at IAIN Fattahul Muluk Papua using two types of ICT tools; the internet based, and non-internet based. The internet-based tools are more favorable to be used in the EFL teaching and learning process in the post-pandemic era. The web-based ICT offered several benefits for the English learning particularly to develop the basic English skills and create more interactive and communicative learning environment. Besides, the result also explained the challenges to the use of ICT including the lack of training, limited network connection, limited technical support, and time, and lack of lecturers competency.

Melor, Lubis, and Pei Lin (2009) conducted research investigating the language learning via ICT. The result found out that students had positive attitude on ICT implementation and be aware of its usefulness in language learning. The students' two major problems were less of English proficiency and ICT literacy. In addition, a study by Al Arif & Handayani (2021) examining the factors influencing the use of ICT for English language learning of the EFL university students revealed that students had positive perception to the use of ICT in learning English. The technological competence and acceptance were the main influential factors in the integration of ICT and English learning.

### **ICT Integration in English Learning**

Information and communication technology (ICT) has played a significant role in the education field, particularly in English language learning. ICT is indicated as the network –based and computer- based technologies that enable the users to create, store, process, share, transmit, and display data or information electronically. The use of ICT in English language teaching and learning activities initiates students' knowledge and understanding toward the technology contribution and integration in the classroom (Boutonglang & Flores, 2011). It is believed that the deployment of technology is effective to boost students' learning experiences and intellectuality (Hsu, 2016). The effectiveness of ICT in English teaching and learning activities has been revealed by many researchers. Today, English language actors including the teachers, lecturers and even students use ICT both in the classical and individual learning that can be done at home. Thus, the ICT tools can be used in different educational settings. In addition, the various types of technological tools including the computer, smartphone, laptop, TV, projector, language lab will potentially affect students' motivation and attitude in English

language learning. Krista & Jay (2001) asserted that using technological devices encourage the English language skills and provide a sense of mobility. However, the success of ICT integration in English teaching and learning process requires the teachers and students to be skillful in digital literacy. It is necessary for the teachers and students to have adequate competency and knowledge to use ICT in order to gain the benefits of ICT usage in English learning.

**METHOD**

This study employed descriptive research design in which the qualitative approach was used to gain the information about a phenomenon in the natural setting. This research had purposes to analyze the potencies, including the benefits and students’ attitude toward the ICT implementation on the English language learning, as well as to investigate the challenges faced by students in using ICT for learning English. The subjects of this research were 63 students majoring in sanitation at a health polytechnic in Jayapura who were taking the English course for one semester. The data were collected from open- ended questionnaire and interview. The results of the questionnaire an interview was explained descriptively to answer the objectives of this research. To gain the data validation, this study used triangulation method by confirming the results from questionnaire and interview. The Miles et all, (2014) interactive model was employed to analyze the data, which consisted of data collection, data condensation, data displaying, and conclusion drawing.

**RESULT AND DISCUSSIONS**

The potencies of ICT usage in language learning were described through some information which was collected from questionnaire and interview. The information included students’ attitude, and the beneficial aspects of ICT in developing students’ English proficiency. Indeed, the involving of ICT in the English learning activities propose more extensive potencies for the further collaboration and participation, the potencies should be wrapped up for learners to take the benefit of ICT usage (Murray, 2005).

*Table 1. Kinds Of Web-Based and Non-Web Based ICT Used in English Learning*

Web- Based ICT		Non-Web-based ICT	
Kinds	Percentage	Kinds	Percentage
Google Classroom	37.80%	Overhead Projector	31.00%
WA Group	15.75%	Language Lab	10.00%
Google Meet	14.96%	Films	14.00%
Zoom Meeting	19.69%	Videos	45.00%
You Tube	7.87%		
Telegram	3.94%		
Total	100%	Total	100%

Students joined the English course in a blended learning model. It made them familiar to use the ICT applications, platforms, or media in English learning activities. Table 1 presented the information about the kinds of ICT media or applications students frequently used. The result showed that in the web-based ICT, Google classroom (37.80%) is the most frequently used application, followed by the Zoom Meeting (19.69%), WA Group (15.75%), Google meet (14.96%), You Tube (7.87%) and Telegram (3.94%). There were 4 non web-based ICT media that students used in learning English. The English videos (45 %) was the highest used media, the others were overhead projector (31%, ), films (14%), and Language lab (10%). It was reported that students use the ICT for various learning activities. For examples, in the English learning using GCR, students commonly access it to see or download the learning materials and assignments, submit the tasks, chat with the lecturers, and see the point of their task. Zoom meeting and Google meet are two applications that students use in the virtual learning in which students can interact with the lecturers or peers in the video conference form. These applications facilitate students to get the material, do presentation, and involve in discussions directly. The traditional classroom atmosphere can be represented by using these applications since lecturer can manage the class to be active and communicative, as well as to direct students in individual or collaborative learning activities. Students usually use You Tube to access the material, for instance, lecturer usually share the You Tube link in delivering the listening materials. The WA group and telegram are the applications that are used to share information about learning activities, materials, and assignment. In line with the above explanation, the respondents' interview results also stated that.

The result above indicated that most respondents underpinned the positive benefits of using ICT in English language learning. There were 85.2% students agreed that the use of ICT fosters the more active and communicative learning environments, and 14.8% students revealed their disagreement. Also, more than half students or 71.5% said the use of ICT in English learning increased the motivation, but 29.5% students disagreed with this statement. In addition, as for the statement "ICT improves both the English skills and knowledge", there were 81% agreed, and only 19% students said the opposite. Students can access a lot of information, practices, and exercise of English learning via the internet which help them in gaining better knowledge of English subject and enhance the English skills. The majority of student (85.7%) felt the benefit of using the ICT in the English learning because it gave them flexibility to learn the language every time and everywhere, whereas 14.3% said the opposite. The online English learning via the video conferences facilitates students to join the learning process from everywhere since it does not require them to be in the classroom. In addition, the use of ICT eases the students to access the learning materials from the teachers or other resources every time as long as they have the compatible ICT tools and internet connection to access it.

In its beneficial aspects to improve the language use, a high percentage of 81,4% students agreed ICT was useful to increase self-confidence to communicate with the target language, whereas 18.6% students disagreed. Lastly, 63.7% students

reported that ICT extended their network to learn or communicate using English language with the other English learners and speakers from different cities and countries. According to Al Arif & Handayani (2021), by using the advanced ICT, students can join the virtual English language groups or communities in which they are able to involve in language learning discussion for sharing information and knowledge. It enables them to learn the English language from its native speakers to get more authentic learning sources and experiences.

**The Students Attitude on the ICT Used**

The use of ICT including computers, apps, and website enhance students’ attitudes in learning English (Idowu & Gbadebo, 2017). Attitude indicates the moderately intense emotions of an individual to response the favorable or unfavorable manner toward something (Anderson, in Melor 2009). Hence, the analysis of students’ attitude gave information how students like or dislike on using ICT in the English teaching and learning activities.

*Table 2. Students’ Attitude on the ICT Used*

Items	Statements			
	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
I like learning English using ICT	33.7	36.4	18.4	11.5
I prefer to learn English using ICT than the traditional method	38.4	22.5	23	16.1
I like doing English tasks and exercise using ICT	31.7	38.2	12.7	7.4
learning English use ICT is interesting and communicatve	32.7	40.2	20.8	6.3
It is easy to use and access ICT in learning English	27.9	30.6	27	14.5

The above table illustrated that students were more favorable to use the ICT in learning English. Students gave their responses differently, but the students chose the agree responses bigger than disagree responses. In detail, 70,1% students liked learning English using ICT, and 60.9% preferred to learn English using ICT than the traditional method. There were 29.9% students disagreed with the first statement, and 39.1% prefer to learn English with the conventional method. In addition, 69.9% students reported they like doing English tasks and exercises using the ICT, and 30.1% disagreed. Students (72.9%) also like learning English using

the ICT because they felt it more interesting and communicative. Most students showed their positive responses of more “interesting” and “communicative” because using the ICT based media in English learning gave numerous kinds of materials forms, learning activities, examinations and evaluations models which create favorable learning environments. The similar percentage was found in the 5<sup>th</sup> statement, 58.5% students said it was easy to use and access ICT in learning English, but 41.5% students stated the opposite. However, the negative attitudes on the use of ICT indicated the issues which influenced students for not using the ICT in English learning.

Students explained their attitudes on using the ICT in learning English in the interview as was presented below:

*YW: I like learning English Using ICT, when lecturer delivers the material in front of the class using videos, or pictures I will pay more attention to the lesson than just read the books.*

*NK: I like learning English using ICT, with the mobile phones and internet I can do my English tasks easier. You know, My English competence is low, if lecturer gives tasks like writing text, it can be very difficult, but by using ICT I can complete and submit it on time.*

### Challenges on Using ICT in English Learning

This part reported the challenges experienced by students in learning English using the ICT. Ertmer (1999) in Hadijah and Shalawati (2014) classified Challenges of Technology integration in Education into the internal and external barriers. There are 8 items which are considered as the influential factors; including the internal and external factors, that hinder students in applying the ICT for learning English. The results on strongly agree and agree were summed up to be “agree” and the response disagree and strongly disagree were summed up to be “disagree”. The result was presented in the table.

*Table 3. Challenges of ICT in English Learning*

Statements	Responses			
	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
Lack of English proficiency	31.7	28.6	25.4	14.3
Lack of interest in using ICT	7.4	13.9	44.6	34.1
Less motivation to learn English using ICT	10.9	17.5	35.	37.5
Lack of ICT literacy	25.4	38.3	26.8	9.5



inadequate of lecturers' instructions or explanations	11.4	28.7	31.5	28.4
Insufficient of internet access	26.6	37.3	27.7	8.4
Incompatible ICT Tools	27	35.7	26.2	11.1
Need more expensive cost	23.8	34.9	23	14.3

Students were asked to give them responses of the items indicated the challenges they faced in learning English using the ICT. The statements were categorized into two; the internal factors (statements no. 1 to 4), and external factors (statements no.5 to 8). Regarding the internal factors, students did not consider the lack of interest and motivation in using the ICT for learning English as the issues. The higher number of students disagreed of the statement they lack of interest in using the ICT (78.7%) and lack of motivation in using the ICT (72.5%). These findings indicated that students showed the positive attitude on the use of ICT, as has been revealed on students' attitude analysis. The internal major issues in using ICT for learning English were the students' lack of English proficiency and ICT literacy. The 60.3% students agreed the lack of English proficiency challenged them in using ICT for learning English, whereas 39.7 disagreed with this item. Also, 63.7% students agreed the issue of lack of ICT literacy; otherwise the 36.3% students did not take it as a concern. In general, the low English proficiency causes a lot of difficulties for students in learning English although they have ICT facilities. Besides, Each ICT tool, application, or platform may require different procedures to access, so that students need to have adequate competence and skill to use the ICT in learning English. The lack of ICT literacy can trap students in confusion during the learning process.

The external issues about the insufficient of lecturers' instructions or explanations did not become the barrier for students to use ICT in learning English. More than half students (59.9%) agreed that lecturers have given them clear instruction or explanation, and 41.1 % students stated the opposite. Three external factors were found out as the challenges in using ICT for learning English. The Major students said their agreement of the issues about insufficient of internet access (63.9%), incompatible ICT tools (62.7%), and need more expensive cost (58.7%). The availability and stability of internet connection is crucial when learning English via the ICT applications or platforms particularly on the online learning activities. However, students reported they commonly experienced the internet connection troubles or out of internet packet when learning English using ICT. Students considered they did not have compatible ICT tools to learn English because most of them only have mobile phones, only few students who have laptops or computers. Indeed, mobile phone is one of important part of ICT that students can use in learning English, but not all of English tasks and learning activities can be

performed via mobile phones. Hence, students need more compatible ICT tools that can facilitate them for learning English. Another challenge that influences students in using ICT is the cost factor, it is including the cost to buy the internet packet, or new ICT tools (HP, Laptop, or computer). tudents were also asked to elaborate their difficulties in using the ICT for learning English in the interview. They told about their English learning activities and difficulties on using ICT in English learning context. The result indicated that students experienced the similar obstacles as what they have revealed in the questionnaire.

## CONCLUSION

Previous research has revealed the essential roles of ICT in the English language teaching and learning context. The English teachers and students are demanded to gain their knowledge and skill toward the use of ICT to promote the benefits of ICT usage in the language learning process. The findings of this research have provided useful information to answer the research' objectives. The analysis result toward the use of ICT in the English language learning indicated that students have the awareness regarding the relevancy of ICT and the improvement of their English proficiency. Students use ICT in different types and ways to assist them getting and completing various English tasks. Also, it is reported that ICT gives benefits to extend the English skills, create more interesting learning environment, and enhance Students self-confidence and accuracy in using the language. The majority of students also have positive attitudes on the use of ICT in English learning activities, although there are still few numbers of students who reveal the pessimistic. However, teachers' contribution is required to extend students' knowledge and understanding about the roles of ICT in learning English. The positive attitudes promote the acceptance of ICT in learning process to gain the positive benefits. In another hand, various problems due to the internal and external factors are found to be obstacles in the implementation of ICT in learning English. Appropriate solutions should be offered to overcome these issues. For example, to develop students ICT literacy, teachers or the schools can give training or socialization to students so that students can obtain adequate knowledge about how to operate and use the ICT in learning English properly.

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