Students’ Perceptions of the Utilization of ICT in English Learning: Way or Barrier?

Ira Irzawati¹, Anastasia Ronauli Hasibuan²

¹English Education Study Program
Muski Charitas Catholic University
Palembang, Indonesia
irairzawati@gmail.com, ²anastasiaronauli@gmail.com

Abstract—This study aimed to describe the students’ perceptions of the utilization of ICT in English learning. One hundred and thirty-four students of a private university in South Sumatera were involved as participants of this study. The questionnaires were administered to gain a portrait of students’ perceptions. Based on the findings, it was figured out that ICT promoted learning activity, maintained learning motivation, and increased learning achievements. However, ICT potentially hindered students’ focus and exposed students to data misuse. These contrary results lead to the discussion on how to maximize the positive impacts of ICT utilization and minimize its potential negative impacts. Several recommendations were formulated such as conducting correlational research to find out the relationship between ICT use and students’ English achievement or investigating the effects of ICT implementation on students’ English learning achievement through experimental design.

Keywords—Students’ perceptions; utilization of ICT; English learning.

I. INTRODUCTION

The emergence of technology has influenced various sectors including industry, health care, and education. In the educational realm, technology has been used to support teaching and learning activities. It also plays an important role and becomes an essential part of the English language [1].

Information and Communication Technology (ICT) is defined as technologies that provide access to information through telecommunication. ICT includes internet, wireless network, cell phones, and other communication media [2]. The use of ICT in ELT promotes the quality improvement of teaching and learning.

In this 21st century, the integration of ICT into ELT is inevitable due to the fact that the students are techno-geeks. They are familiar with technology so that they use technological devices on a daily basis and learn better within the technology-based environment [3].

Over the past two decades, research findings have proved that the utilization of ICT in English learning provides positive effects on students. The application of ICT enables students to use English in an authentic, communicative, and stress-free atmosphere. It also supports student-centered learning through teacher-student interaction [4].

Furthermore, the utilization of ICT attracts students’ attention, facilitates the learning process, and promotes meaningful learning [5]. Moreover, it increases students’ learning motivation and empowers them to become critical thinkers and problem solvers [6]. In addition, it promotes students’ autonomy and helps them to be more confident and independent [7].

The results of previous studies also revealed that the utilization of ICT in English learning facilitated the students to improve their English skills and proficiency. ICT promoted the improvement of students’ reading achievement, writing achievement, and vocabulary mastery as it exposed them to a more techno-geeks learning atmosphere and various authentic online materials [5].

ICT is also viewed as media to promote a new learning model. It holds a key role in facilitating appropriate activities for students and has a significant impact on the application of appropriate teaching methods in order to present fun and meaningful learning experience for the students [8]. The integration of ICT allows teachers to vary teaching and learning activities; therefore, it can gradually change the teaching style from teacher-centered to student-centered [9].

ICT not only provides some benefits but also some hindrances. Lack of access, lack of time, lack of effective training, teachers’ attitudes, and students’ attitudes are common barriers which usually discussed in the related research [10]. As the integration of ICT in ELT has its own limit. Thus, it should be integrated as an effective supplementary and a valuable teaching tool [4]. Understanding both benefits and hindrances of the utilization of ICT in ELT is a crucial step, as the information of it will contribute to the development and success of the teaching and learning process.

The aim of ELT is to make students master English well. ICT can be an effective tool for helping language learners. It should be used as an important part of the students’ academic programs. The teacher can play a role as a facilitator who models the application of ICT, meanwhile, the students can learn the way to use it correctly and benefit from the exposure of it [8]. To support the students’ success in mastering English, it is essential to understand how they perceived the utilization of ICT in English learning. A comprehensive understanding of students’ perceptions toward the use of ICT in English learning will support teachers to facilitate better teaching and promote learners to experience better learning and achievement [11].
This study investigated students’ perceptions of the utilization of ICT in English learning. It was intended to find out whether the students had positive or negative perceptions toward the use of ICT in English learning. In short, is ICT the way or the barrier for students in English learning?

II. METHOD

This survey study intended to find out the information related to the students’ perceptions of the utilization of ICT in English learning. It was a quantitative study conducted by using a numerical system in gathering the data [12]. Therefore, the method of gathering information was organized and systematic.

One hundred and thirty-four students of a private university in South Sumatera were involved as participants of this study. The participants were come from three different faculties, namely: Business and Accounting Faculty, Science and Technology Faculty, and Health Science Faculty. The researchers selected the samples by using a convenience sampling technique. They were third-semester students who had taken English classes in the previous semester.

The students used ICT while they were taking English classes for various purposes. For instances, they used it for accessing relevant resources from certain websites, conducting presentation in the class, submitting assignments, discussing each other or with lecturers, etc. In short, the students were familiar to ICT use especially to support their learning process.

The researcher distributed the questionnaire to the samples in order to discover the students’ perceptions of the utilization of ICT in English learning. The questionnaire was in the form of closed-ended and open-ended. To respond closed-ended questions which consist of 42 statements, the participants were required to choose four alternative options, namely: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The alternative options from SA to SD are equal to numerical values range from 4 to 1. Meanwhile, to answer open-ended questions which comprise 7 statements, the participants were provided the opportunities to express their opinions freely towards the utilization of ICT in English learning.

At the beginning, the total number of closed-ended questions was 50 and the total number of open-ended questions was 10. However, after conducting pilot test and review process, there were 8 closed-ended questions and 3 open-ended questions were excluded.

The closed-ended questions which comprise 42 statements and the open-ended questions which cover 7 statements were distributed to the participants in order to find out data dealing with abundance of ICT facility, role of ICT in ELT, benefits of utilizing ICT, ICT as a motivation booster, effects of ICT on students’ learning achievements, ICT and digital literacy, shortcomings of using ICT, and students’ expectations.

In analyzing the data of the questionnaire, the researchers used percentage analysis. The closed-ended data were analyzed by calculating the numbers of the target population and the data obtained. To present the results in a number, the researchers counted the percentages. In addition, the open-ended data were analyzed by classifying the participants’ answers which described data results and meaning.

On the basis of data analysis, the researchers were able to describe students’ perceptions of the utilization of ICT in English learning. The data revealed whether students perceived ICT as a way or barrier in learning English.

III. RESULTS AND DISCUSSION

The results of closed-ended questions provided information regarding the abundance of ICT facility, the role of ICT in ELT, benefits of utilizing ICT, ICT as a motivation booster, effects of ICT on students’ learning achievements, ICT and digital literacy, shortcomings of using ICT, and students’ expectations.

In conjunction with the abundance of ICT facilities, most of the students (51%) agreed that ICT facilities provided by the university were adequate. For instance, the existence of language and computer laboratories equipped with sufficient ICT tools eased students in learning English. In addition, hotspots facilitated students to access internet easily for supporting their learning needs. Therefore, 63% of students believed that these facilities enabled them to learn English better. The use of ICT makes knowledge acquisition more accessible. It also provides students a chance to have a better concept and understanding of the learning process [13]. In other words, proper ICT facilities bring more effective, active, and supportive learning atmosphere and finer result. Table I presents data related to students’ responses toward the abundance of ICT facility.

| No | Statement                                      | SD | D  | A  | SA |
|----|-----------------------------------------------|----|----|----|----|
| 1  | ICT facility is adequate.                      | 3% | 39%| 51%| 7% |
| 2  | ICT facility supports learning process.         | 0% | 23%| 63%| 14%|

In line with it, 56% of students showed a strong agreement on the important role of ICT in English learning. ICT has a key role in ELT as stated by around 57% of students. The use of ICT has provided a fresh learning atmosphere, presented a new learning model, and facilitated inside and outside classroom learning activities. Therefore, ICT is considered as a powerful tool for educational change and reform [13]. It plays an essential role in creating a new model of teaching and learning [5]. The emergence and development of ICT have shifted the way of English teachers and students embracing materials, techniques, and media used in teaching and learning activities. Table II reveals data pertaining to students’ perceptions toward the role of ICT in ELT.
TABLE II. THE ROLE OF ICT IN ELT

| No | Statement                                             | SD | D  | A  | SA |
|----|-------------------------------------------------------|----|----|----|----|
| 1  | ICT is important for learning.                        | 0% | 2% | 42%| 56%|
| 2  | ICT facilitates learning activities.                   | 0% | 1% | 42%| 57%|

Dealing with motivation, 53% of students said that ICT improved their learning motivation. Learning English by making ICT tools was fun as mentioned by 54% of students. In agreement with it, 50% of students also said that ICT supported the various learning models and activities. Thus, learning was more interesting. The application of ICT in ELT may provide a learning atmosphere where motivation is maintained and enhanced [14]. Intrinsic motivation brought by ICT use may empower students to be better learners [6]. Intrinsic motivation encourages students to perform better and gain higher learning achievement. Learning in fun, interesting, and motivated atmosphere helps learners to be more active and participative learners. Students are not reluctant to engage in learning activities, express their thoughts, opinions and ideas, discuss about their difficulties in learning with teachers, etc. Table III displays data in relation to students’ feedbacks toward ICT as a motivation booster.

TABLE III. ICT AS A MOTIVATION BOOSTER

| No | Statement                                              | SD | D  | A  | SA |
|----|--------------------------------------------------------|----|----|----|----|
| 1  | The use ICT increases students' motivation.            | 0% | 5% | 53%| 42%|
| 2  | The integration of ICT into ELT creates interesting learning activities. | 0% | 4% | 50%| 46%|
| 3  | Learning English with ICT is fun.                      | 1% | 3% | 54%| 42%|

Moreover, around 40% of students said that ICT provided learning sources and eased communication between students and teachers. ICT is a source of information, data, and knowledge related to various disciplines. Through ICT, student can access learning materials easily. They can use materials taken from internet whether as main or supplementary materials which support them during learning process. As a communicative tool, ICT presents a system that facilitates communication between teachers and students or among students [15]. Therefore, communication gap and barrier is able to be minimized and eliminated by using ICT. Students have various alternative communication media by making use ICT. Table IV shows data in relation to students’ responses toward benefits of utilizing ICT.

TABLE IV. BENEFITS OF UTILIZING ICT

| No | Statement                                              | SD | D  | A  | SA |
|----|--------------------------------------------------------|----|----|----|----|
| 1  | Internet provides learning sources.                    | 0% | 4% | 46%| 50%|
| 2  | ICT facilitates communication between students and teachers. | 0% | 5% | 40%| 55%|
| 3  | ICT promotes learning activities.                      | 0% | 7% | 56%| 37%|
| 4  | ICT helps students to improve their English achievement. | 0% | 5% | 60%| 35%|
| 5  | ICT facilitates communication among students.           | 1% | 6% | 52%| 41%|
| 6  | ICT promotes interactive and communicative learning atmosphere | 0% | 3% | 65%| 32%|
| 7  | ICT helps students to be more active in teaching and learning activities. | 0% | 8% | 63%| 29%|
| 8  | ICT supports student centered learning.                | 0% | 5% | 75%| 20%|
| 9  | ICT promotes collaborative learning                    | 0% | 6% | 69%| 25%|

ICT brought more benefits, around 75% of students agreed that ICT promoted student center learning as it offered students more opportunities to engage in teaching and learning activities. ICT enables students to involve more in the teaching and learning process through accessing, selecting, organizing, and interpreting information and data gained from various resources [13]. Integrating ICT encourages students to be more independent learners and actively involves in finding resources, sharing ideas, and presenting finding result. In this process, teacher’s role is as a facilitator who assists students to solve their problems by guiding and directing them. Teacher is also an assessor who reviews and evaluates learners’ work.

Furthermore, over 60% of students stated that ICT facilitated collaborative, active, interactive, and communicative learning. Learning by making use ICT helped students work together well, communicate each other easily, and built an interactive learning atmosphere. Collaboration and communication brings positive effect for students’ social relationship as well. Good social relationship enables students to do their tasks together easily since it is possible for them to communicate everything and handle it together. They will not be reluctant to build interactive discussion to communicate problems in doing their assignment.

Pertaining to ICT and learning achievement. Most students agreed that ICT facilitated them to improve English achievement. Moreover, ICT promoted the improvement of listening and reading skills as stated by 54% of students. Furthermore, 60% of students pointed out that ICT helped them to increase speaking skill and 59% of them mentioned that ICT supported the enhancement of writing skills. Additionally, 56% and 62% of students agreed that the integration of ICT into English learning enabled them to enrich grammar knowledge and vocabulary mastery.

Since ICT provides access to enormous learning sources, it therefore helps students to use it in searching any learning materials. For examples, students are able to train and increase listening and speaking skills by using podcasts. Furthermore, they can enhance writing skill by doing blog writing practice. In addition, they are able to improve reading comprehension by accessing reliable sites, such as BBC, VOA, or Jakarta Post which provide various reading sources. Reading various texts helps students to enrich their vocabulary. They can find a lot of new vocabularies through reading. They also may learn English structure through identifying and learning sentences in reading text. In short, the utilization of ICT in ELT has considerably facilitated the enhancement of students’ English...
achievement [8]. Table V describes students’ perceptions toward the effects of ICT on their learning achievement.

| No  | Statement                                      | SD | D  | A  | SA |
|-----|------------------------------------------------|----|----|----|----|
| 1   | ICT improves listening achievement.         | 0% | 8% | 54%| 38%|
| 2   | ICT improves reading achievement.           | 0% | 10%| 54%| 36%|
| 3   | ICT improves speaking achievement.          | 0% | 11%| 60%| 29%|
| 4   | ICT improves writing achievement.           | 0% | 11%| 59%| 30%|
| 5   | ICT improves grammar achievement.           | 0% | 7% | 56%| 37%|
| 6   | ICT improves vocabulary achievement.        | 0% | 5% | 62%| 33%|

In the association with digital literacy, 56% of students stated that they could operate a computer. Most of students have PC at home and they are familiar to using it. Moreover, 62% and 52% of students said that they were able to use various applications, such as: LINE, WhatsApp, Snapchat, etc. and web-based tools, such as: blogs and email. Additionally, it was found that students were capable of using ICT tools to support learning activities and achieve better learning results as mentioned by 50% and 54% of students. ICT provides a broader range of opportunities for students to practice and develop their English proficiency [16]. Technology is a part of students’ life. They depend on it for daily basis activities including learning. Therefore, they are familiar with technological devices, software and applications. Table VI presents information dealing with students’ opinions toward ICT and digital literacy.

| No  | Statement                                      | SD  | D  | A  | SA  |
|-----|------------------------------------------------|-----|----|----|-----|
| 1   | Students are able to operate computer.        | 0%  | 12%| 56%| 32% |
| 2   | Students are able to use various applications.| 0%  | 14%| 62%| 24% |
| 3   | Students are able to use simple programs, such as: browser, email, and Microsoft office. | 1%  | 5% | 52%| 42% |
| 4   | Students are able to access learning sources sites to support learning process. | 1%  | 7% | 50%| 42% |
| 5   | Students are able to operate technological devices, such as: laptop, tabs, projector, etc. to support learning process. | 0%  | 8% | 54%| 38% |

In spite of the numerous benefits, the utilization of ICT in English learning might potentially cause several problems. 46% of students expressed their agreement on the statement that the internet distracted their focus while learning. The students found it challenging to concentrate on the lesson when they used the internet because they tended to use it for other activities as well, such as: playing online games and accessing social media. Students might be distracted by various elements on the internet thus proper control is needed to anticipate it [5].

In line with it, 48% of students said that the use of the internet in learning activities might expose them to data misuse or plagiarism since they did not paraphrase the material taken from the internet and only copy-paste it. At last, around 42% and 55% of students also stated that it was difficult to select the proper websites and find appropriate materials as internet provided a large number of resources. As the growth of ICT integration presents the additional challenges, thus higher education institutions and related parties should grapple with the issue of plagiarism, facilitate the provision of relevant online learning resources, and support students to gain critical literacy abilities [17].

In agreement with it, 61% and 56% of students pointed out that it was necessary to improve ICT maintenance and it was essential to solve network error issues. The problems are potentially hinder studying and teaching activities which rely on ICT use. Hence, it needs special concerns from related parties.

In contrary to shortcomings above, 53% of students said that it was not hard to use technological devices. Furthermore, 45% of them agreed that it was easy to gain ICT literacy. Moreover, 58% and 60% of them believed that both students and teachers had good digital literacy. Table VII illustrates data about students’ perceptions toward shortcomings of using ICT.

| No  | Statement                                      | SD  | D  | A  | SA  |
|-----|------------------------------------------------|-----|----|----|-----|
| 1   | Internet potentially distracts focus.         | 4%  | 20%| 46%| 30% |
| 2   | ICT maintenance is not optimum.               | 1%  | 10%| 28%| 61% |
| 3   | It is difficult to select reliable websites.  | 5%  | 23%| 42%| 30% |
| 4   | It is hard to use technological devices.      | 7%  | 53%| 32%| 8%  |
| 5   | Network doesn’t work properly.               | 3%  | 10%| 31%| 56% |
| 6   | ICT literacy is not easy to have.            | 4%  | 18%| 45%| 33% |
| 7   | Internet resources can be misused.           | 2%  | 24%| 48%| 26% |
| 8   | Supporting technological devices are not sufficient. | 5%  | 41%| 33%| 21% |
| 9   | It is difficult to select reliable materials. | 0%  | 23%| 22%| 55% |
| 10  | Students lack of digital literacy.           | 6%  | 58%| 30%| 7%  |
| 11  | Teachers lack of digital literacy.           | 8%  | 60%| 28%| 4%  |

In relation to the expectation, a great number of students (65%) expected to have more opportunities making use of ICT in teaching and learning activities. They also hoped to have more guidance in finding proper material and selecting the appropriate websites for supporting learning activities as stated by 55% of the students. In addition, 46% of them said that they were eager to involve in a more interactive and communicative learning environment. Students’ expectations
In agreement with the results of closed-ended questions, the results of open-ended questions revealed similar data. According to students, the utilization of ICT in learning activities brought both advantages and disadvantages. The students mentioned about promoting learning activity, nourishing motivation, and elevating learning achievement as the main advantages of using ICT in learning. Meanwhile, hindering focus and exposing to data misuse or plagiarism were the potential disadvantages of applying ICT in learning.

One of students states that “In my opinion, the use of ICT in ELT has positive and negative sides. Learning English through using technological devices is very interesting and fun. Thus, we are not easily to get bored and have high motivation to study. However, sometimes, a few students misuse it. For example, they prefer to use internet for playing games and chat. They do not really focus on the lesson”.

Another student asserts that “I like studying by using laptop or other gadgets. Technology makes us easy to do everything including learning. I often use internet to find related references for doing my assignments. It helps me a lot. But, a few students only copy the data from internet, they do not paraphrase it. It is not a good habit. So, ICT can expose students to plagiarism.”

The other student mentions that “So far, I enjoy studying by using technological devices. I usually browse some reliable resources to help me understand the material given by the lecturer better. Lecturer usually asks us to submit our assignment via email, conduct presentation by using power point, and access blogs, podcasts, webquests, and reliable sites. Those activities help us to be a better learner and gain higher achievement in learning. ICT should be used more in teaching and learning activities because it has many benefits.”

The data of closed-ended and open-ended questions indicated that the students generally had positive perceptions towards the utilization of ICT in English learning. However, since ICT also brought several disadvantages, it is important to anticipate the problems for the successful integration to support better learning outcomes. In other words, ICT is a double-edged sword that may hinder or support students’ English learning success. Hence, in order to maximize the benefits and minimize the shortcomings, the availability, effectiveness, and suitability of the ICT used in a certain educational context need to be carefully considered and determined [18].

### IV. CONCLUSION

ICT can be a way or barrier for students to gain success in learning English. It can support students’ learning success through promoting learning activity, nourishing motivation, and elevating learning achievement. However, it may also hinder students’ focus and expose them to data misuse. Therefore, preventing actions are needed in order to maximize the advantages and minimize the disadvantages of utilizing ICT in English learning. Providing relevant rules to make students be more discipline and focus on the lesson, building students’ awareness on how important to use data wisely and correctly, and controlling students’ learning activities are among options that can be used to prevent the potential shortcomings of ICT use in learning activities.

As ICT has an essential role in English learning, it is worth to investigate other studies related to ICT use in ELT. This study focuses on identifying students’ perceptions of ICT utilization in English learning. It is suggested that future researchers conduct investigation on other issues related to ICT use and apply different types of research design. For instances, future researchers are recommended to conduct correlational research to find out the relationship between ICT use and students’ English achievement or investigate the effects of ICT implementation on students’ English learning achievement through experimental design. Furthermore, it is also recommended that future researchers conduct qualitative research dealing with ICT and ELT.

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### REFERENCES

[1] G. Dudeny and N. Hockly. How to Teach English with Technology. New York, NY: Pearson Longman, 2007.
[2] K. Ratneswari, “Information and communication technology in education”, Journal of Applied and Advanced Research, vol. 4, no. 1, p. 45-47, 2018.
[3] S. Ghaiefekr and W.A.W. Roody. “Teaching and learning with technology: Effectiveness of ICT integration in schools”, International Journal of Research in Education and Science, vol. 1, no. 2, p. 175-191, 2015.
D. Cakici. “The use of ICT in teaching English as a foreign language”, Participatory Educational Research, no. 4, p. 73-77, 2016.

M.M. Yunus, N. Noordin, H. Salehul, C.H. Sun, M.A. Embi. “Pros and cons of using ICT in teaching ESL reading and writing”, International Education Studies, vol. 6, no. 7, p. 119-130, 2013.

S.S.C. Young. “Integrating ICT into second language education in a vocational high school”, Journal of Computer Assisted Learning (2003), no. 19, p. 447-461, 2003.

M.R. Ahmadi. “The use of technology in English language learning: A literature review”, International Journal of Research in English Education, vol. 3, no. 2, p. 115-125, 2018.

A.P. Gilakjani and L. Branch. “A review of the literature on the integration of technology into learning and teaching of English language skills”, International Journal of English Linguistics, vol. 7, no. 5, p. 95-106, 2017.

T. Hidayati. “Integrating ICT in English language teaching and learning in Indonesia”, JEELS, vol. 3, no. 1, p. 38-62, 2016.

M.J. Riassati, N. Allahyar, and K.E. Tan. “Technology in language education: Benefits and barriers”, Journal of Education and Practice, vol. 3, no. 5, p. 25-30, 2012.

Y. Punie, D. Zinnbauer, and M. Cabrera. A Review of the Impact of ICT on Learning. Luxembourg: Office for Official Publications of the European Communities, 2008.

J.W. Crewell. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (2nd ed.) Upper Saddle River, NJ: Merril Prentice Hall, 2005.

J.S. Fu “ICT in education: A critical literature review and its implications”, International Journal of Education and Development Using Information and Communication Technology (IJEDICT), vol. 9, no. 1, p. 112-125, 2013.

N. Azmi “The benefits of using ICT in the EFL classroom: From perceived utility to potential challenges”, Journal of Education and Social Research, vol. 7, no. 1, p. 111-118, 2017.

K. Oulmaati, S. Ezzah, and K. Samadi. “The use of ICT in the learning process among the students of History and Civilization at Abdelmalek Essaadi University, Morocco”, International Journal of Scientific Research and Engineering Technology (ISET), vol. 8, no. 2, p. 971-979, 2017.

C. Yuan, L. Wang, and J. Eagle. “Empowering English language learners through digital literacy: Research, complexities, and implications”, Media and Communication, vol. 7, no. 2, p. 128-136, 2019.

L.Czerniewicz and C.Brown. “The use of information and communication technology in teaching and learning in South African higher education practices in the Western Cape”, Perspectives in Education, vol. 23, no. 4, p. 1-18, 2005.

A.M.I. Ibrahim. “Information and communication technologies in ELT”, Journal of Language Teaching and Research, vol. 1, no. 3, p. 211-214, 2010.