Technology-assisted Language Learning: Friends or Enemies

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Abstract. This case study compared learners' perspectives regarding using technology as a learning device. A total of 35 university students completed virtual interviews to collect information dealing with the student's perspectives on technology-assisted language learning. They completed virtual interviews on their responses to technology implementation during the online teaching-learning process. The virtual interviews were conducted casually and followed the procedures of 'narrative interviewing.' The discussions were started by asking some questions about the general experience of using technology during the teaching-learning process at university. The thematic analysis of qualitative data supplemented the interview findings by providing insights into why technology assists language learning during online learning. In general, however, most students argue that using technology as a tool for online learning has three roles. They are helping students find information, minimize the virus's spread, and facilitate learning. This study demonstrated the potential of technology for assisting language learning during virtual learning.

1 Introduction

Industrial Revolution 4.0 causes changes that are all around us, which is marked by the presence of artificial intelligence (artificial intelligence, AI), robotics (robotics), big data (big data), and networks connected via the internet (the internet of things, IoT), all of which will combine to affect jobs and industries. The current era, which we know as the era of "21st-century learning," is marked by very fast changes in information technology [1]. Donovan and Green define 21st-century learning as learning that concerns the recognition that students need the knowledge and skills to enable them to succeed in the life of a global and diverse society characterized by technology-centricity [2]. This means that students must be able to master the knowledge and demonstrate competence at a higher level of thinking. This higher-order thinking ability can only be achieved when students get learning that emphasizes problem-solving skills.

The era of the Industrial Revolution 4.0 and the challenges of the 21st-century demand the adoption of new literacy, namely data, technology, and human literacy. The adjustment process is so fast that it needs to be improved by all parties involved, including education. There needs to be more than old literacy, namely reading, writing, and mathematics. Along
with the rapid advancement of information technology, it is a necessity that we must master technology and then use it as a supporting medium in teaching and learning activities, including language teaching.

As a lecturer/student of language education, it is necessary to have a learning approach that combines materials, pedagogy, and technology to support the cultivation of thinking skills, the development of a "sense of inquiry" and students' creative thinking abilities. Language learning in higher education in the 21st-century is the digital age. Regarding the digital age, Dangwal & Srivastava mentioned the characteristics of this era are; the way we teach and the way students want to learn, being facilitated by technology; technology should not be the master but rather the tool that can support our teaching and learning process, every teacher should know the proper use of technology, pedagogy and content of particular subject to make their daily classroom teaching effective and efficient, and digital Pedagogy is effective in supporting, enhancing, and transforming the process of teaching and learning and in consequence provides enriched, assorted and flexible learning opportunities for learners [3]. Language learning and language teaching in higher education programs need to be adjusted to be relevant to the digital age. Using new formats for the language learning process (face-to-face, blended learning, fully online learning, and implementing technology in language teaching) is a demand for language learning in this century.

Several previous studies have highlighted the importance of using technology in language learning. A study conducted by Warschauer & Healey provides an overview of the use of computers in language learning [4]. This study describes the benefits of using technology in language teaching and analyzes the role of technology in enhancing authentic language interaction and production. In addition, a meta-analysis study conducted by Wang investigates the impact of technology on language learning [5]. This study concludes that the use of technology in language learning has a positive effect on improving language skills. Another study conducted by Hubbard informed about the role of technology in developing learner autonomy in language learning [6]. This study proposes a theoretical approach that focuses on learning activities and designing a technology-based learning environment to support learner autonomy.

Based on the spotlight on previous studies which have highlighted the benefits of using technology in language learning, further research is still needed to explore the learner's perspective on the use of technology as a language learning tool. Investigating whether technology acts as a supportive "friend" or a barrier "enemy" in language learning and understanding how it can effectively motivate student engagement in language learning will contribute to existing knowledge pools.

In line with the previous statements, this case study explored the learners' perspectives regarding using technology as a language-learning device. Whether the use of technology in language learning supports ("friends") or hinders ("enemies") learning is the question that will be explored through this case study. How technology can be utilized in language teaching and how technology can motivate the student's engagement in learning will be explored in this study.

2 Method

In this case study, the “narrative interview” outlined by Reissman was used as the research method [7]. The aim is to collect detailed information about students' perspectives on technology-enhanced language learning. A total of 35 students participated in the study, and virtual interviews were conducted to gather the necessary information. Virtual interviews are a way to find out students' views and experiences regarding the integration of technology into online learning. The interviews were conducted informally,
allowing participants to freely express their opinions and receive information about their 
experiences with language learning technologies. At the start of the interview, the participants 
were asked general questions about their common experiences using technology in university 
teaching and learning. These questions are meant to gather information about their familiarity 
with the technology, their comfort with it, and any relevant experience they have.

The information collected from the interviews was subjected to thematic analysis, a 
qualitative data analysis technique. The thematic analysis identifies patterns and themes in 
participants' responses, enabling a deeper understanding of their views on technology-
enhanced language learning. Using narrative interviews and conducting virtual interviews, 
this study aims to capture participants' diverse and nuanced perspectives on their experiences 
with language learning technologies. Thematic analysis of the qualitative data complements 
the interview results and provides a comprehensive and in-depth explanation of students' 
views on technology-enhanced language learning in the context of online teaching and 
learning at the university level.

The following are the steps for analyzing data based on Reissman's theory:
1. The first step is to transcribe all recorded interviews. This transcription involves typing out 
   all of the conversations in the interview in detail, including intonation, pauses, and verbal 
   expressions.
2. After transcription is complete, initial coding is performed. This coding involves reading 
   and looking for patterns and themes that emerge in the interviews. Researchers can 
   provide codes or labels to certain parts of the interview related to the research topic.
3. Thematic analysis: Once the initial coding is complete, the thematic analysis is carried out. 
   This analysis involves grouping similar codes into more general themes or categories. 
   Researchers look for patterns and relationships between these themes to understand the 
   data better.
4. Interpretation: After the main themes have been identified, the researcher interprets the 
   findings. This involves understanding the meaning and implications of emerging themes 
   and relating them to the wider research context.
5. Presentation of results: The final stage is presenting the results of the analysis. The 
   researcher summarizes the main findings in the form of narrative or relevant findings.

   By following these steps, the researcher analyzed the data from the narrative interviews 
   and gained an in-depth understanding of students' perspectives and experiences in using 
technology for language learning [7].

3 Finding

The results of this case study are presented and discussed thematically based on the research 
problems. The writer provides examples for each finding in order to enhance the reader's 
comprehension of the results. Dealing with the implementation of technology in language 
teaching, virtual interviews were used to explore the students' agreement. From 35 
respondents, it denotes that 97% of the students have the same mind that technology assists 
language teaching and learning, while the 3% of the rest affirm that there is nothing special 
with technology use for language teaching and language learning. In touch with the 
technologies applied, almost all of the respondents mention some kinds of applications used. 
They are Zoom, google Meetings, Elita, padlet, Google Jamboard, class points, and other 
interactive quizzes.

In addition to the student’s response on the use and the type of technology used for 
language teaching and language learning, other data dealing with the role of technology in 
language teaching and learning can be classified into three.
3.1 Helping students find information

Digital technology has helped us all to get the information we want; in this digital era, information and application processes have been shortened as efficiently as possible, and of course, we can access them at any time, including students and lecturers. The use of technology in this learning greatly facilitates both students' and lecturers' learning. Technology in language teaching and language learning has some functions used in learning activities; it can function as a tool, as a tool for users or students to assist learning, for example, in searching materials, information, news, and so on, as it is stated in the following students' excerpts.

"we can easily find references about teaching-learning, and it can help us obtain information that may not exist in the textbook."
"Provides material, references also provide tools such as Zoom and Gmeet to help in a learning activity."
"Technology can help students work together to develop new knowledge and insight, reflect on what they are learning, or cooperate to learn the course materials more deeply."
"very helpful for finding more information on the internet and via online meetings."
"through technology, we can easily get reliable information."
"the use of technology can help us explore more things."

Based on the above interview results, it can be summed up that through technology, the students and lecturers can easily find and explore the materials for language teaching and learning. In other words, technology in language teaching and language learning has some functions used in learning activities, for example in searching materials, information, news, and so on. Technology can help students work together to develop new knowledge and insight, reflect on what they are learning, or cooperate to learn the course materials more deeply. This is in line with Golonka, who shows that, with technology like chat, the number of learner language productions and their complexity increases significantly [8]. The literature expresses moderate support for claims that technology improves learner output and interaction, influence and motivation, feedback, and metalinguistic knowledge.

3.2 Minimizing the spread of the virus

The COVID-19 Pandemic outbreak has made the world society busy, including Indonesia. Almost all aspects of life have profoundly changed, including education in Indonesia. The Indonesian government has made some regulations to prevent the outbreak from spreading more widely. Social distancing and physical distancing regulations are created due to the increasing number of people infected with Covid 19. These are followed by the school-from-home (SFH) policy for the students.

Through circular no. 4 in the year 2020, the Minister of Education and Culture announced the implementation of an education policy in a state of emergency because of the coronavirus disease (covid-19). He mentioned that the learning processes at home are applied with the following points [9].

a. The learning process from home is held to give meaningful learning experiences to the students.

b. The focus of learning from home is the skill to face the pandemic situation.

c. Home activities can vary based on the student’s condition and interests.

d. The students’ reports or the product of learning from home can be evaluated qualitatively and given feedback by the teachers directly.
In responding to the above policy, the implementation of technology in the teaching-learning process can be one of the solutions. Below are the students’ excerpts on their opinions.

"Provide a virtual class, reducing the spreading of the corona. Time-efficient to communicate with each other, especially during group assignments."

"Technology helps us in learning in the pandemic era because, in this situation, we really need technology."

“It's very helpful for me. We can still learn even though we have long distances."

From the above statements, social distancing and physical distancing regulations have been created due to the increasing number of people infected with COVID-19. These are followed by the school-from-home policy for the students. The learning process from home is held to give meaningful learning experiences to the students. The students' report or the product of learning from home can be evaluated qualitatively and given feedback by the teachers/lecturers directly. In these conditions, technology helps us in learning in the pandemic era because, in these situations, we really need technology. Otherwise, we can still learn even though we have long distances. It is supported by Fauzi & Khusuma’s study, which mentions that Online learning helps teachers during the COVID-19 pandemic period [10].

Technology helps us to communicate with each other in the pandemic era; since this era, social and physical distancing has been recommended. Through technology, we can still learn, although over a long distance. Social distancing and physical distancing regulations have been created due to the increasing number of people infected with COVID-19.

### 3.3 Facilitating learning

Along with the times, technology in its development certainly brings changes to people's lives, especially in the world of education, which will also continue to experience development. Moreover, the era of technological disruption makes it easier for someone to get the information that is desired. So, students will easily get information learning through online media that is easily accessible in modern times of technological development. Therefore, the teacher/lecturer must change the way of conveying material in a different way. If only delivered by reading a book, then it makes no difference. The following excerpts are a positive impression from students regarding the use of technology in learning.

"Technology helps me during online learning because it is one of the most important media to use. Such laptops and cell phones really helped me during the learning process."

"I think technology can help both teachers (lecturers) and students in learning; for example, in making a quiz, it will be easy to assess."

In short, technology is used to help online learning as the students can still receive material and work together in groups. Meetings can also be done via Google Meetings or Zoom, so students will easily get information or learning materials through online media that is easily accessible in modern times of technological development.

Digital technology has helped us all to get the information we want; in this digital era, information and application processes have been shortened as efficiently as possible, and of course, we can access them at any time, including students and lecturers. The use of technology in this learning greatly facilitates both students’ and lecturers’ learning. This is in line with Golonka's research, which shows that technology increases learner output, interaction, influence, motivation, feedback, and metalinguistic knowledge [8]. Based on data from students' virtual interviews, technology is very helpful in the teaching and learning process in the classroom in language learning. Technology facilitates and facilitates learning. In other words, technology can be a friend who will facilitate and assist language learning.
4 Conclusion

This case study explores the implementation of technology in language teaching and learning. Data generated by using virtual interviews showed that 97% of students agree that technology helps language teaching and learning, while 3% confirmed that there is nothing special about using technology. Most respondents mentioned applications such as Zoom, Google Meetings, Elita, padlet, Google Jamboard, class point, and interactive quizzes. Technology can play three main roles in language teaching and learning: helping students find information (providing resources and helping students work together to develop new knowledge and insights), minimizing the spread of the virus, and facilitating learning. The implication shows the importance of designing learning activities that utilize technology to achieve these roles. In other words, the use of technology can help increase the effectiveness of the language learning process. In addition, it is very important to understand and utilize various relevant technological applications in the context of language teaching.

References

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