AN ANALYSIS OF LEARNING TECHNOLOGY INNOVATION IN THE COVID-19 PANDEMIC IN BANGUNREJO

Anggun fauzia[1], Alvi Raihan Utami[2]

English Education

Anggun_fauzia@gmail.com

Abstract

Technology-based learning is a learning process that uses various information technologies as learning media. In technology-based learning, the teacher's role as the sole authority of knowledge turns into a facilitator for students to interact with various learning resources. The study was conducted from May to June, using qualitative descriptive approach by using a sampling of 7 teachers who teach in the Bangunrejo area. The purpose of this research is to see whether technology - based learning can increase students ' enthusiasm in learning .

Key words: Technology-Based Learning, COVID-19 Pandemy, Teaching Challenges

INTRODUCTION

Covid-19 pandemic is a phenomenon that emerged in 2019 and continues until 2021. This phenomenon is already familiar to the world, including Indonesia. Covid-19 is a disease that affects many people from all over the world (Aminatun et al., 2021). Due to this phenomenon, most aspects of human life have changed. People in 2020 are not allowed to gather in one place. They are obliged to keep their distance from each other (Pustika, 2018). The Covid-19 pandemic has had an impact on the world of education not only in Indonesia but also in other countries. Since March 2020 online learning activities have been the government's choice to prevent the spread of the Covid-19 virus (Oktavia & Suprayogi, 2021). The existence of the corona virus outbreak has hampered teaching and learning activities that usually take place face-to-face to online or distance learning.

(Pustika, 2020) cited (Rido & Sari, 2018) stated that an education without gathering students and teachers seems impossible. The Covid-19 pandemic has also forced people to practice social distancing, meaning there is no face-to-face interaction, even though interaction is one of the important features in the teaching and learning process (Ayu & Pratiwi, 2021). Interaction is a prominent pattern in which teachers and students relate to share information and knowledge, especially in language classes (Sari, 2015) in (Istiani & Puspita, 2020). This increases the effectiveness of the language teaching and learning process, due to the involvement of two-way interactions and active participation between teachers and students in classroom activities (Utami et al., 2020). Mandasari (2016) stated

that the teacher has something to do with the success of students' English learning. Almost all English teachers have certain ideas or beliefs about what is the best approach to teaching English (Mandasari, n.d., Wahyudin & Kuswoyo, n.d.). They often come to English class which is conditioned by their previous educational experience, cultural background, and social interaction, which can further shape their beliefs about English language teaching.

The process of teaching and learning languages has undergone major changes due to technological developments (Sari & Wahyudin, 2019) . The use of technology in education has paved the way for educators to innovatively shape their modern media in language learning. Pustika (2020) stated that the development of technology and facility in Indonesia is not equal yet as Indonesia is such a huge country. However, teachers in Indonesia have to adapt to this situation fast. They have to master various application as well as platform that support their e-learning with their students. (Aminatun, 2016) cited in Adiyanto & Febrianto (2020) stated that "Technology-based learning" is delivered via any technology, and contains also the distance learning (including TV, Radio, Internet etc).

(Oktaviani et al., 2020) stated that English is a foreign language in Indonesia and makes the teaching and learning process not that easy even though some students have been learning English since they were in kindergarten. Therefore, lecturers need to create an interactive and interesting teaching and learning process in order to attract and motivate students, especially in the era of the industrial revolution 4.0. One way is the use of technology in the classroom. (Pustika, 2020) cited (Oktaviani & Desiarti, 2019) stated that technology is not necessarily a new thing in human life. Most people today, even children, can use and operate technology in life. This makes children called digital natives, which means they can master technology better than adults. English is an important skill that some people need to become global citizens. Currently, English is widely used in several aspects of human life, namely education, technology, tourism, health, economy, and so on (Gulö, 2014) in (Skill, n.d.). We often see or hear some English discourses in our society. English is somehow close to human life (Pustika & Wiedarti, 2019). This research will reveal about the innovation of EFL teachers towards technology-based learning. Through this research, researchers hope to provide the best technology-based learning innovations for EFL teachers. The purpose of this research was conducted to answer the following questions: 1. Can teacher innovation towards technology-based learning increase student

enthusiasm? 2. What are the challenges for teachers to innovate in technology-based learning?

LITERATURE REVIEW

Technology-Based Learning (TBL) is online learning and web-based learning that only includes learning that occurs through the internet (Abbad et al., 2009). Technology-based learning is a learning process that uses various information technologies as learning media (Simamora, Sinaga & Oktaviani, 2020). In technology-based learning, the teacher's role as the sole authority of knowledge turns into a facilitator for students to interact with various learning resources. Hermanto et al., (2021) stated that "Technology-based learning" is delivered via any technology, and contains also the distance learning (including TV, Radio, Internet etc). Aguss (2021) state that the field of education has undergone significant changes over the last 20 years. The advent of the digital age and the importance of incorporating new technologies have also significantly changed the way of learning and communication (Megawaty, 2015). New technologies are joining the world of education as much as possible to help the learning process in various fields including English (Diharjo et al., 2020). In this era, technology is developing in such a way that conventional ways of teaching and learning do not encourage students and teachers to reach their full potential. By using technology, teaching and learning is enhanced and given a new dimension. This is the best way to create language learning especially during critical situations.

METHOD

This research use descriptive qualitative approach. According to Pahdi et al., (2020) in (Ahluwalia, 2020), descriptive qualitative research aims to investigate detailed descriptions of people, places, or events in a qualitative setting approach. The subject of this study was chosen by using purposive sampling. Purposive sampling is a sampling used by considering several factors (Helmy et al., 2018). It is also (Aminatun & Oktaviani, 2019) cited (Erri et al., 2016) stated that purposive sampling procedure chooses participants who meet some specific predetermined criteria. The data was taken using interviews which were distributed using a questionnaire in the form of a google formular via *Whatsapp*. The participants of this study were English teachers in Bangunrejo, Central Lampung. The sample taken in this study amounted to 10 teachers who each teach in the Bangunrejo. The questions used are open-ended questions. Descriptive analysis is used as a technique in

analyzing data. The data obtained from the results of questionnaires and interviews were then explained in the form of data descriptions.

RESULTS AND DISCUSSION

This research will reveal about the innovation of EFL teachers towards technology-based learning. It consists of six questions that are distributed in the form of open-ended questions that can answer the problems of this research. The sample of this study was interviewed through an online platform (*WhatsApp* Application). The following questions were answered by the participants of the study: 1. What technology media do you use in conducting technology-based learning? (e.g. whatsapp, zoom, google meeting, quiziz, internet, e-module, etc) 2. What will you do to improve your teaching using technology when you run into a technical problem? 3. What are some problems you have when teaching using technology? 4. Can technology-based learning increase student enthusiasm? 5. Do you think technology-based learning is the best way to do learning during a pandemic? All of the responses to the questions were transcribed and analyzed after the data collection to gain the required information. Figure 2 shows WhatsApp based Interview.

Data items 1.1 WhatsApp based Interview

Participants answer questions that have been given in the form of open questions. Researchers use this type of question to see the perceptions and experiences of each participant. As in the first question about the technology media used by EFL teachers in technology-based learning during the COVID-19 pandemic. As we can see below:

"I use technology-based learning using the Whatsapp application to send assignments and zoom meetings or goggle meet when explaining material"

"*Whatsapp*, *Zoom*, internet, quiziz, youtube, e-module"

"Whatsapp, zoom, google meet"

The answers above are representative of all participant answers. From these answers, we can see that the average media used in technology-based learning is *Whatsapp* because this media is familiar and certainly all students have the application, besides that the application is also easy to use, participants answered that this *Whatsapp* media is commonly used to send assignments. This result is supported with (Oktaviani et al., 2020; Sari & Putri, 2019; Suprayogi & Novanti, 2021) are other researchers that have conducted the similar topic like this Besides *Whatsapp*, the media that teachers use on average in technology-based learning are *Zoom* and *Google Meet*, this application is used to explain learning materials so that students understand better. The second question is about what to do when experiencing technical problems during technology-based learning:

"I will use another tool to handle it"

"Keep in touch with students, so at least stay active and have interaction"

"Giving students another chance is like giving them more time to do the task".

"I will provide information to students via WhatsApp group".

From the data above, it proves that every teacher has a different opinion and the above data is taken as a sample from the answers of all participants. Based on the data obtained, teachers have different ways of overcoming the obstacles they have during technology-based learning, such as giving additional time when students are doing assignments, providing information via WhatsApp, not leaving the class during problems, providing other alternative media so that they can continue to do things. learning. This result also in line with (Handayani & Aminatun, 2020; Kurniawan et al., 2019; Mandasari & Agusty, n.d.) For the third question, what are the problems that are often experienced when doing technology-based learning:

"students are less enthusiastic about learning, some students cannot follow the lesson and children when the teacher delivers material, students do not understand what is explained and students who do not understand do not want to ask."

"I rarely have problems teaching using technology, but my students do. they usually have poor connections, don't have a conducive environment, and don't know how to operate technology (zoom for example)."

"Technical problems such as the lack of quality of the technology I use."

Based on the findings of the data above that the problem of student enthusiasm for learning, understanding the material. Then another problem is the internet quota of students, sometimes there are some students who have these problems, then the problems are teaching using technology, but my students do. they usually have poor, so being a teacher in today's era must have better skills in technology. The next question is whether technology-based learning can increase student enthusiasm? we can see below:

" Technology-based learning is less conducive because students when learning online are not enthusiastic about learning, students sometimes become lazy because students play rather than study. if used wisely and creatively can increase student morale. I'm sure it can lift their spirits by integrating various technologies and using diff rent types of media."

As we can see that technology-based learning does not attract students' enthusiasm and interest in learning, factors that cause such as lack of understanding of the material and also this learning is sometimes not utilized as well as possible, such as more time playing than studying. And the last question is whether technology-based learning is the best way to do learning during a pandemic. We can see the information obtained below:

" Yes, because it will make it easier for students and teachers to carry out learning activities without having to come to class."

" For now online learning is the safest way in the pandemic era"

"In my opinion, during a pandemic, it is not allowed to meet brave learning, it really helps the educational process to run during a pandemic."

"I think yes, because we have to focus on eradicating the pandemic first."

"Yes, because we can do it outside the classroom, so we can reduce the spread of the virus, we can do it at home using technology."

"Yes, in this era of online learning, learning to use technology is the best"

Based on the information obtained, it proves that technology-based learning during the COVID19 pandemic is the best way to do learning. Because during a pandemic, face-to-face learning is kept to a minimum to prevent virus transmission.

The purpose of this research is to find out whether technology-based learning can increase students' enthusiasm for learning or not. According to the results of the research, teacher innovation in technology-based learning did not increase students' enthusiasm for learning

in this study.(Nani & Ali, 2020; Novita et al., 2020) stated that technology helps teachers to create positive attitudes towards teaching and learning, but problems such as lack of time management, evaluation effectiveness, students' attention to learning, and also material development should be considered to reduce errors and mistakes by students and teacher. While it can be effective for these critical situations, any unforeseen use of technology can bring some problems and problems to instructors, students, or administrators.

CONCLUSION (Times New Roman 12, Bold, Spasi 1, spacing before 12 pt, after 6 pt)

Provide a statement that what is expected, as stated in the "Introduction" chapter can ultimately result in "Results and Discussion" chapter, so there is compatibility. Moreover, it can also be added the prospect of the development of research results and application prospects of further studies into the next (based on result and discussion).

REFERENCES

Abbad, M. M., Morris, D., & de Nahlik, C. (2009). Looking under the Bonnet: Factors affecting student adoption of E-learning systems in Jordan. *International Review of Research in Open and Distance Learning*, *10*(2), 1–25. https://doi.org/10.19173/irrodl.v10i2.596

Adiyanto, A., & Febrianto, R. (2020). Authentication Of Transaction Process In E-marketplace Based On Blockchain technology. *Aptisi Transactions On Technopreneurship (ATT)*, *2*(1), 68–74. https://doi.org/10.34306/att.v2i1.71

Aguss, R. M. (2021). ANALYSIS OF PHYSICAL ACTIVITY CHILDREN AGED 7-8 YEARS IN THE TIME OF ADAPTATION TO NEW HABITS. *The 1st International Conference on Language Linguistic Literature and Education (ICLLLE)*.

Ahluwalia, L. (2020). EMPOWERMENT LEADERSHIP AND PERFORMANCE: ANTECEDENTS. *Angewandte Chemie International Edition, 6(11), 951–952.*, *7*(1), 283. http://www.nostarch.com/javascriptforkids%0Ahttp://www.investopedia.com/terms/i/in_specie.asp%0Ahttp://dspace.ucuenca.edu.ec/bitstream/123456789/35612/1/Trabajo de Titulacion.pdf%0Ahttps://educacion.gob.ec/wp-content/uploads/downloads/2019/01/GUIA-METODOL

Aminatun, D. (2016). *Eye movements and lexical access in spoken-language comprehension: Evaluating a linking hypothesis between fixations and linguistic processing*. UNS (Sebelas Maret University).

Aminatun, D., Ayu, M., & Muliyah, P. (2021). ICT Implementation during Covid-19 Pandemic: How Teachers Deal with a New Style of Teaching. *The 1st International Conference on Language Linguistic Literature and Education (ICLLLE)*.

Aminatun, D., & Oktaviani, L. (2019). USING "MEMRISE" TO BOOST ENGLISH FOR BUSINESS VOCABULARY MASTERY: STUDENTS'VIEWPOINT. *PROCEEDINGS UNIVERSITAS PAMULANG*, *1*(1).

Ayu, M., & Pratiwi, Z. F. (2021). THE IMPLEMENTATION OF ONLINE LEARNING IN ENGLISH LANGUAGE TEACHING DURING PANDEMIC: THE TEACHERS'VOICE. *Journal of Research on Language Education*, *2*(2), 93–99.

Diharjo, W., Sani, D. A., & Arif, M. F. (2020). Game Edukasi Bahasa Indonesia Menggunakan Metode Fisher Yates Shuffle Pada Genre Puzzle Game. *Journal of Information Technology*, *5*(2), 23–35.

Erri, W. P., Dian, W. P., & A, P. N. (2016). Game Edukasi Berbasis Android Sebagai Media Pembelajaran Untuk Anak Usia Dini. *J I M P - Jurnal Informatika Merdeka Pasuruan*, *1*(1), 46–58. https://doi.org/10.37438/jimp.v1i1.7

Gulö, I. (2014). Unique characteristics of Nias language. *International Journal of English and Education*, *3*(3), 26–32.

Handayani, E. T., & Aminatun, D. (2020). STUDENTS'POINT OF VIEW ON THE USE OF WHATSAPP GROUP TO ELEVATE WRITING ABILITY. *Journal of English Language Teaching and Learning*, *1*(2), 31–37.

Helmy, N. F., Johar, R., & Abidin, Z. (2018). Student's understanding of numbers through the number sense strategy. *Journal of Physics: Conference Series*, *1088*. https://doi.org/10.1088/1742-6596/1088/1/012098

Hermanto, E., Setiawansyah, S., & Hamidy, F. (2021). Application of accounting information system for school committee finance. *The 1st International Conference on Advanced Information Technology and Communication (IC-AITC)*.

Hidayati, Abidin, Z., & Ansari, B. I. (2020). Improving students' mathematical communication skills and learning interest through problem based learning model. *Journal of Physics: Conference Series*, *1460*(1). https://doi.org/10.1088/1742-6596/1460/1/012047

Istiani, R., & Puspita, D. (2020). Interactional Metadiscourse used in Bloomberg International Debate. *Linguistics and Literature Journal*, *1*(1), 13–20.

Kurniawan, D. E., Iqbal, M., Friadi, J., Borman, R. I., & Rinaldi, R. (2019). Smart Monitoring Temperature and Humidity of the Room Server Using Raspberry Pi and Whatsapp Notifications. *Journal of Physics: Conference Series*, *1351*(1). https://doi.org/10.1088/1742-6596/1351/1/012006

Mandasari, B. (n.d.). *FACTORS INFLUENCING TEACHERS'BELIEFS ON THE USE OF AUTHENTIC MATERIALS TO TEACH LISTENING*.

Mandasari, B. (2016). An Analysis of Teachers' Beliefs toward Authentic Materials in Teaching Listening. *Teknosastik*, *14*(1), 19–25.

Mandasari, B., & Agusty, S. T. P. (n.d.). MOBILE LEARNING: THE IMPACT OF WHATSAPP USAGE IN ENGLISH LANGUAGE LEARNING. *Section Editors*.

Megawaty, D. A. (2015). *Penerimaan Layanan Keuangan Dalam Belanja Online Berdasarkan Tingkatan Generasi*. Institut Technology Sepuluh Nopember.

Nani, D. A., & Ali, S. (2020). Determinants of Effective E-Procurement System: Empirical Evidence from Indonesian Local GovernmeNani, D. A., & Ali, S. (2020). Determinants of Effective E-Procurement System: Empirical Evidence from Indonesian Local Governments. Jurnal Dinamika Akuntansi. *Jurnal Dinamika Akuntansi Dan Bisnis*, *7*(1), 33–50. https://doi.org/10.24815/jdab.v7i1.15671

Novita, D., Husna, N., Azwari, A., Gunawan, A., & Trianti, D. (2020). *Behavioral Intention Toward Online Food delivery (The Study Of Consumer Behavior During Pandemic Covid-19)*. *17*(1), 52–59.

Oktavia, W. R., & Suprayogi, S. (2021). GRAMMATICAL COHESION IN BORIS JOHNSON'S SPEECH ENTITLED CORONAVIRUS SPREAD IN UK. *Linguistics and Literature Journal*, *2*(1), 8–16.

Oktaviani, L., & Desiarti, E. M. (2019). A lecturer's and students' perspective toward ethnic snake game in speaking class at Universitas Muhammadiyah Malang. *Teknosastik*, *15*(2), 53–59.

Oktaviani, L., Mandasari, B., & Maharani, R. A. (2020). IMPLEMENTING POWTOON TO IMPROVE STUDENTS'INTERNATIONAL CULTURE UNDERSTANDING IN ENGLISH CLASS. *Journal of Research on Language Education*, *1*(1).

Pahdi, R., Mailizar, & Abidin, Z. (2020). Indonesian junior high school students' higher order thinking skills in solving mathematics problems. *Journal of Physics: Conference Series*, *1460*(1). https://doi.org/10.1088/1742-6596/1460/1/012031

Pustika, R. (2018). Considering Students' Reading Interest in Text-Selection to Foster Literacy in the English Classroom. *ADJES (Ahmad Dahlan Journal of English Studies)*, *5*(2), 69–77.

Pustika, R. (2020). Future English teachers' perspective towards the implementation of e-learning in Covid-19 pandemic era. *Journal of English Language Teaching and Linguistics*, *5*(3), 383–391.

Pustika, R., & Wiedarti, P. (2019). THE IMPLEMENTATION OF READING INSTRUCTION IN EFL CLASSROOM. *ETERNAL (English, Teaching, Learning, and Research Journal)*, *5*(1), 75–87.

Rido, A., & Sari, F. M. (2018). Characteristics of classroom interaction of english language teachers in Indonesia and Malaysia. *International Journal of Language Education*, *2*(1), 40–50. https://doi.org/10.26858/ijole.v2i1.5246

Sari, F. M. (2015). *An Analysis of Classroom Interaction in the English Language Teaching Process (A Case Study at the Tenth Grade Students of Accelerated Class 1 and Accelerated Class 3 of SMA Negeri 3 Surakarta)*. UNS (Sebelas Maret University).

Sari, F. M., & Putri, S. N. (2019). Academic Whatsapp group: Exploring students' experiences in writing class. *Teknosastik*, *17*(2), 56–65.

Sari, F. M., & Wahyudin, A. Y. (2019). Undergraduate Students' Perceptions Toward Blended Learning through Instagram in English for Business Class. *International Journal of Language Education*, *3*(1), 64–73.

Simamora, M. W. B., & Oktaviani, L. (2020). WHAT IS YOUR FAVORITE MOVIE?: A STRATEGY OF ENGLISH EDUCATION STUDENTS TO IMPROVE ENGLISH VOCABULARY. *Journal of English Language Teaching and Learning*, *1*(2), 44–49.

Sinaga, R. R. F., & Oktaviani, L. (2020). The Implementation of Fun Fishing to Teach Speaking for Elementary School Students. *Journal of English Language Teaching and Learning*, *1*(1), 1–6.

Skill, T. E. (n.d.). *60TH TEFLIN INTERNATIONAL CONFERENCE SCHEDULE Day 2: Wednesday, 28th August 2013*.

Suprayogi, S., & Novanti, E. A. (2021). EFL Learner's Literary Competence Mapping through Reader-Response Writing Assessed using CCEA GCSE Mark Scheme. *Celt: A Journal of Culture, English Language Teaching & Literature*, *21*(1), 1.

Utami, A. R., Aminatun, D., & Fatriana, N. (2020). STUDENT WORKBOOK USE: DOES IT STILL MATTER TO THE EFFECTIVENESS OF STUDENTS'LEARNING? *Journal of English Language Teaching and Learning*, *1*(1), 7–12.

Wahyudin, A. Y., & Kuswoyo, H. (n.d.). *A CLOSER LOOK OF THE EFL INDONESIAN TEACHERS'UNDERSTANDING TOWARDS THE CURRICULUM 2013 IN RURAL AND URBAN SECONDARY SCHOOL*.