Implementing Technology in English Language Learning: Friend or Foe

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Abstract

Nowadays, foreign language education relies heavily on digital technology. A growing emphasis on 21st-century skills and massive technological advancements raise more concerns than ever about the competency of English as Foreign Language (EFL) teachers. This study aimed to investigate the level of digital technology readiness among EFL teachers in Indonesia and respondents' experiences in implementing technology in the education curriculum in Indonesian schools. A quantitative survey of 90 teachers was conducted to observe the teachers' perceptions and experiences with technology. The study showed that technological advancement has helped teachers teach the English language. The respondents believed that technology could improve the students' English skills, including speaking, listening, reading, writing, pronunciation, and grammar. This study provided the teachers' perception of the value of using technology in English language learning.

Keywords
Digital technology, English language learning, information and communication technology

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Introduction

Students' information and communication technology (ICT) competencies are regarded as critical components of 21st century skills (Ratheeswari, 2018). Asad et al. (2020) defined ICT as information technologies and communication using electronic equipment, especially computers, to create, store, analyse, and send information". Governments and educational departments around the world might invest heavily in ICT infrastructure and other initiatives to prepare teachers to use technology for learning and teaching. Doing so can help them to capitalize on the growing potential of ICTS and better equip students with ICT skills. ICT might play an essential role to form the human capital that meets the needs of modern world economies (Klochkova et al., 2019). Recent research in teacher education has demonstrated that the quantity and quality of teachers' technology experiences in their teacher education programs are significant factors determining new teachers' adoption and application of ICTs (Lawrence & Tar, 2018).

Razak et al. (2018) claimed that technology can provide significant influence in English language classrooms to improve teaching methods. The teacher thus needs to have sufficient knowledge in applying the technology in their teaching (Bhattacharjee & Deb, 2016). Students will then benefit if teachers use digital technology in their classrooms. The shape of the teaching process has become a primary source of concern because of massive technological advancements. It has significantly increased the value of using technology in the classroom. Despite the necessary rush to incorporate digital technology into the teaching and learning process in EFL classrooms, opportunities and possibilities may arise. The objective of this study is to examine teachers' attitudes and use of technology in their teaching process. This study seeks to address the following research questions:

- How do teachers use technology in EFL classrooms?
- What is the impact of technology on English language learning?
- How do students perceive the use of technology?
- What is the impact of technology on students?

Literature Review

The advancement of ICT is undeniably transforming the workplace culture. Teachers must be prepared to use and adopt technology because it improves students' learning. Ahmadi and Reza (2018) believed that when learners learn with technology, it assists them in developing their higher order thinking skills. Afterward, teachers must recognize that the 21st century classroom must include technology-supported teaching materials (Chapelle & Hegelheimer, 2013). To positively influence teachers' adoption and use of technology, training, development workshops, and school policies should be redesigned (Razak et al., 2018). A robust learning environment can be created once the teacher uses technology in their teaching. Furthermore, it will transform the educational process of learning and teaching so that students deal with knowledge constructively and actively.

Because of the growing demand for effective communication among people from diverse social and cultural backgrounds in the workplace or academic settings, the need to

learn other languages using various learning resources and methods has become the focus of educational research. The COVID-19 pandemic has also impacted education, including on teachers and students. Due to the closure of universities and schools, teachers and students were forced to quickly adapt to remote teaching. To meet such a demand, SLA and EFL research seeks to determine how a language such as English can be effectively acquired and learned by EFL/ESL learners. Using technology as a learning method will increase the learner's motivation and language skills (Ahmad and Reza, 2018). Such technologies might enable students to practise what they have learned in the classroom.

Numerous advantages are provided by technology in the field of education. Sulaimani et al. (2017) stated that technology integration has been influenced by technological tools and the appearance of new methods and strategies in the field of language learning and teaching as a result of having access to a wide range of resources. Because students can process information inside and outside the classroom, technology encourages them to learn everywhere and at every time.

According to Goldie (2014), modern society, with its rapid scientific and technological advances, has seen an exponential rise in accessible knowledge and continuously changing and emerging technologies. By increasing learner engagement in the learning process, technology has the potential to transform a passive learner into an active learner (Parkin et al., 2012; Sawang et al., 2017). Nowadays, there is widespread acceptance of technology as a necessary component of society, and learners must be exposed to technology from an early age (Nikolopoulou & Gialamas, 2015).

Advances in technology have also enabled students to interact virtually with their peers and collaborate on learning input and output. Sabiri (2020) claimed that ICT enables the lesson to become more interesting and motivating for the learner. Nowadays, they can specify the learning platforms based on their needs or interests. Aside from that, learners can interact virtually with other learners to exchange data and collaborate on learning input and output. Furthermore, since the activities platform can be customized for individual learners, the learning process is personalized. Teachers should then be aware and well-prepared to effectively integrate these advances into their practice.

Computer-Assisted Language Learning (CALL) has become a specific term used in the field of EFL. There have been a few research investigations demonstrating that CALL has a positive impact on the learning process in EFL classrooms. Son (2019) indicated the respondents showed positive attitudes toward digital technology use. The findings of the study also showed that the use of digital devices by respondents was enjoyable, and they believed that the use of digital tools and resources could enhance their learning.

However, many teachers might be familiar with yet incapable of using the technology. Callo and Yazon (2020) reported that most of the respondents at the Laguna State Polytechnic University, Philippines had less competence in using Facebook Classroom, Google Classroom, Screencastify, Loom, Flipgrid, Screencast-o-matic, and webinars. In line with that, some participating teachers in Joshi et al. (2020). It indicated that they were not well trained in teaching by using online platforms such as Zoom and Skype. In Indonesia, the participating teachers at vocational schools in the Sleman district had a low category of digital technology care, technology literacy, and digital technology capabilities (Astuti et al., 2021).

Teachers' behavior shifts as the modern classroom evolves, necessitating the adaptation of teachers' roles and responsibilities. Technology may then require the teachers to adapt and adopt their teaching strategies to student-centered instruction. Doucet et al. (2019) implied that teachers can now co-teach, team teach, and collaborate with colleagues from other departments, so they no longer teach in isolation. Teachers' technology-related experiences, such as their ICT professional development and ICT knowledge, are critical factors that can influence the use of technology in their classrooms (Bowman et al., 2022).

The emergence of digital education stands out among the recognized policy trends during the pandemic (Zancajo et al., 2022). In the national recovery plans nations, digitalization virtually monopolizes the focus of attention on education policy. Recovery plans for most nations will put a strong emphasis on creating digital infrastructure and skills. In these strategies, digitization is anticipated to assist traditional educational delivery in formal education rather than marking a change from earlier educational models, even though do not present new topics on educational agendas, the policy ideas, instruments, and tactics on teacher development, the crisis seem to have contributed to making policy goals to promote digitalization. Although the crisis has not yet resulted in significant policy innovations, it has refocused attention (and added public resources) on digital technologies and online learning. Therefore, the Covid-19 problem is a path-accelerator that helps to enhance the policy instruments and remedies that improve teachers' digital technology care, technology literacy, and digital technology capabilities of teachers.

Methodology

An online survey was used in this study to collect information regarding respondents' use of technology and their usage of technology in general. Evans and Mathur (2018) suggested that online surveys can help researchers to reach more respondents easily. The survey in this study, consisting of 55 questions, was developed using Google Forms. It included closed questions to capture biographical details and respondents' profiles and Likert scale questions to determine skill levels, use of technology, and types of technology. The quantitative data were analysed using Excel, providing descriptive data on the percentage of respondents in each category.

Ninety-four respondents completed the online survey. The respondents were dominantly English teachers from various primary and secondary schools. They were also lecturers from both state and private universities in Indonesia.

Findings and Discussion

Four themes were used in presenting the analyzed data in this paper: technology usage in daily life, technology usage in English language learning, teachers' perception of the usage of technology for students, and technology improving students' English skills.

Technology usage in daily life

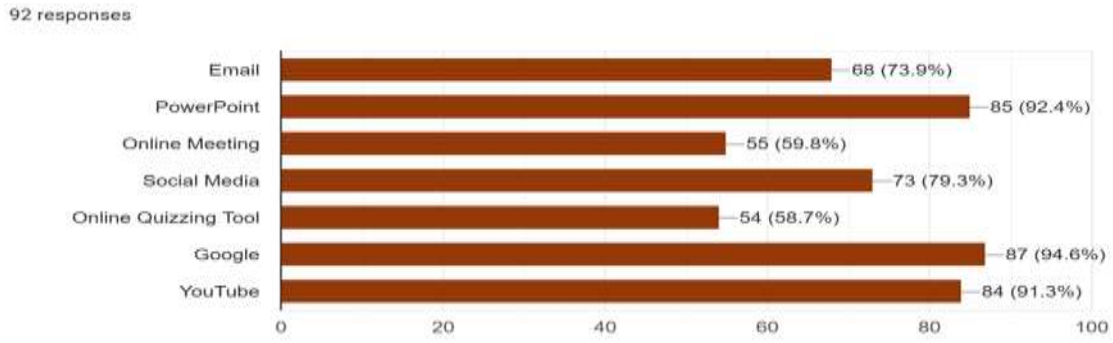
The first research question sought to understand how teachers use the technology in EFL classrooms. One of the responses to the questionnaire statements related to this question is shown in Table 1.

Table 1. *Technology usage in daily life*

No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	Technology helps me in doing my work.	65.2%	34.8%			
2	I found technology useful in my daily life.	64.8%	34.1%	1.1%		
3	Technology makes my life easier.	70.7%	29.3%			

As implied by Table 1, technology has been the respondents' daily need. The data above is contradicted by Astuti et al. (2021) that indicated the teachers in their study had low capability, care, and literacy in using digital technology. All the teachers who answer this question like to use digital technology. The answers imply that they care, have the capability, and have good literacy in using digital technology. The difference in the result can be tracked to the respondent between teachers pre-pandemic and after-pandemic. The respondents in this study come from teachers that must learn and use digital technology during compulsory remote teaching for almost 2 (two) years during the pandemic. It can be seen from Figure 1 that all teachers use digital technology in some varieties.

Figure 1. *Tools / media used by respondents*



The adoption of digital technology comes from the lockdown due to the pandemic and the ensuing e-learning experiment may have overemphasized the significance of digitalization and online education in the post-Covid-19 age (Zancajo et al., 2022). While many educational systems throughout the world have been gradually transitioning to the

digital age over the past few years, the Covid-19 problem has sped up this trend. Despite numerous obstacles, the Covid-19 issue has given Tech businesses and products a chance to expand internationally. Technology companies provided free access to various digital resources for the continuation of education during school closures for educational institutions, teachers, and students, earning millions of unpractised users in the process. In addition, education organizations signed emergency contracts with many of these businesses to purchase infrastructure, web platforms, and other products.

The Covid-19 pandemic has presented an opportunity for the Government of Indonesia (GoI) to push for the digitization of school institutions. GoI in their *Merdeka Belajar* (Freedom to Learn) curriculum expects teachers to implement ambitious improvements to digitize the classroom, frequently stressing the idea that the present design of educational systems has proven insufficient for a world that is becoming increasingly digital. The GoI has also stressed the importance of students' digital skill development as a critical tactic for navigating the post-Covid future and reducing the pandemic's monetary impact. Even if GoI was in favor of such policies before the Covid-19 crisis, the peculiarity of the Covid-19 scenario is the amount of consensus and focus placed on making digital education the primary theme to deliver education that can bring teachers and students using digital technology in daily life.

Technology usage in English language learning

Some questions in the online survey asked the respondents to show their views on the usage of technology in learning English. Their responses varied from Strongly Agree to Strongly Disagree.

Table 2. *Technology usage in English language learning*

No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	Technology is useful for English language learning.	89%	9.9%			1.1%
2	I want to use technology in English language learning.	80.4%	18.5%			1.1%
3	Technology is hard to be applied in English language learning in Indonesia.	12.2%	8.9%	10%	54.4%	14.4%
4	I have used technology in English language learning at my school.	47.3%	50.5%	2.2%		
5	I use Elllo in teaching listening in English language learning.	19.8%	31.9%	24.2%	22%	2.2%
6	I use Trello for English language learning.	13%	34.8%	28.3%	20.7%	3.3%
7	I use Padlet in English language learning.	22.8%	46.7%	17.4%	12%	1.1%

Table 2 demonstrates how the teachers' believed technology was helpful to help them to improve students' progress in learning English. Interestingly, there was not much variety in the first claim that technology was useful. In other questions, the teacher's answers were mostly positive in saying that they wanted to adopt new applications for learning English that they do not know, such as Elllo, Trello, and Padlet. However, they also responded negatively by stating that technology was hard to be implemented in Indonesia. It might indicate that most respondents were willing to accept new technology and were optimistic about the digital technology implementation in English language learning.

Here supposedly, we must take institutional and contextual factors into account to understand the scope and depth of the changes that digitalization has prompted inside the education sector. Although regions in the context of a national crisis suffer identical external pressures, they can understand the difficulties that these forces entail differently. One reason was based on region and schools that they would tend to react to digitalization differently depending on their institutional strengths and standard forms of resources and provision of professional development (Bowman et al., 2022; Zancajo et al., 2022).

There is interesting fact that there are more varieties in answering how hard to adopt technology and adoption technology that was not widely promoted use during the pandemic compared to how useful technology on the usefulness of technology. However, in this data, the lack of resources and professional development for the respondents that did not have the optimism of application technology in language teaching could not be connected. The less enthusiasm for using technology as the respondents had little access to the Internet access (50%), good computer equipment (68.8%), and enough funding. The findings also suggested that the willingness to adopt digital technology was not connected to the problems they encountered. However, most respondents who were against the implementation of technology in English language learning had good funding (56.8%) and good internet access (50%). Meanwhile, most respondents had taken their undergraduate degree that had exposure to professional development related to the technology introduced.

Teachers' perception of the usage of technology by students

Table 3. *Teachers' perception of the usage of technology by students*

No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	Students can do self-learning more easily because of technology.	46.7%	46.7%	4.3%	1.1%	1.1%
2	Students have known digital literacy and technology well.	25%	42.4%	28.3%	4.3%	
3	Students are more motivated in learning if I use technology in the teaching and learning process.	34.8%	55.4%	8.7%	1.1%	
4	Students can focus better if they use technology.	26.1%	55.4%	18.5%		

Table 3 shows that teachers had favorable opinions on using technology for students. The response to the survey demonstrated that teachers profited from the ability to use technology to make students can do self-learning (93.4% agree and strongly agree). This perception might be relevant to what Mulyono et al. (2021) stated the teachers in their study believed their students could easily access learning material without being restricted by time or location. This condition is related to students' self-learning. Moreover, the responding teachers also positively perceived that technology could assist them in motivating students to learn (90.2% agree and strongly agree) and have better focus (81.5% agree and strongly agree). The result was lower in the perception that students had better focus and good technology literacy and knew it well (67.4% agree and strongly agree). A peculiar thing it indicated that a lot of teachers believed even though students did not have good technological literacy and did not know it well, they were still able to help the students to do self-learning, had more focus, and could motivate the students better. It indicated that students were different from the teacher. Bowman et al. (2022) said that without good digital literacy and knowledge about technology, it would affect the motivation, focus, and use of technology in learning and teaching.

Technology usage in English language learning

Table 4. *Technology improves students' English skills*

No	Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	My students' speaking skills are better thanks to technology.	18.5%	54.3%	23.9%	3.3%	
2	My students' listening skills are better thanks to technology.	19.6%	63%	15.2%	1.1%	1.1%
3	My students' reading skills are better thanks to technology.	21.7%	64.1%	12%	2.2%	
4	My students' writing skills are better thanks to technology.	18.7%	58.2%	17.6%	5.5%	
5	My students' pronunciation skills are better thanks to technology.	25%	67.4%	6.5%	1.1%	
6	My students' grammar skills are better thanks to technology.	18.5%	53.3%	22.8%	5.4%	

As shown in Table 4, the responding teachers were happy that the technology they had employed could help students in improving their English language skills. However, there is a difference in the number of people who agree on what skills are supported by technology. The biggest thing is helping to increase publicity with more than 90% agreeing. Meanwhile, in listening, writing, and grammar, it only reached 70%. It is a very interesting finding because it shows the peculiarity that there are teachers who feel that technology can help pronunciation but not in speaking, and teaching writing is better than grammar. On the

other hand, reading is also not the highest, even though what really helps from technology based on literature is the ease of finding reading material online, not pronunciation training. It might be interesting to study them more deeply the data through qualitative methods.

Conclusion

The findings in this study have relevance to how technology is helping teach the English language. It would be vital to share best practices since most study respondents were happy with their adoption of technology in English teaching. It became interesting that teachers did not always fully consider their students' literature, and knowledge of technology affected their use of technology for self-learning and focus on studying. The data from this study is more interesting because the resources provided by schools do not affect the optimism in technology implementation but also adopt recent technology.

Regarding the current study, there are a few things to keep in mind. First, our participation cannot be regarded as an accurate representation of all Indonesian English language teachers since virtually all the participants were graduate students and learning by using technology most of the time in an Open University type. Thus, their acceptance of technology has a higher probability better than the national average.

Despite the warnings raised above, this study has successfully shown how language teachers regarded technology as a helper for them to teach their students. However, more research is required to determine how students have viewed teachers' methods for providing learning by technology. More investigation is required to determine why some teachers who are in good professional development do not optimism about new technology and the technology adoption in English language teaching in Indonesia. The research needs to use qualitative research to be able to dig deeper into implementation technology in Indonesian schools, especially in a context affected by a cultural difference not only about resources that are already abundant in the literature.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest.

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