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## The Challenges of Implementing Digital Literacy in Teaching and Learning Activities for EFL Learners in Indonesia

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### Abstract

The proper comprehension and use for digital technology of English teachers can drive the learning process to ideal learning activities. Vice-versa improper comprehension of digital literacy by the teachers unexpectedly gives issues to learning process. Teachers must comprehend well the power of digital technology from aspects, such as: challenges, strategies, and the ideal purpose of digital literacy to be embedded in English language teaching. This critical review reveals the challenges of the implementation of digital literacy to support English language teaching. There are three main challenges that the students face in implementing digital literacy in the classroom. Those are lack of supportive access and digital tools, lack of digital literacy skill from teachers and also students' lack of digital literacy skills. However, by acknowledging those issues, it could raise the attention of learners, teachers, and policymakers leading them to take further actions to mitigate the barriers.

## Introduction

In recent days, the use of digital tools has immersed word widely in people's daily life. People have utilized digital tools in various ways either merely for getting the information or for communicating with each other. In the education context, the existence such of tools align with the internet could also support the process of teaching and learning activities in the classroom (Durriyah & Zuhdi, 2018; Azlan et al., 2020). For example, students are easier to construct, to process, and to communicate the knowledge that they have attained from the internet to their life (Argawati & Suryani, 2020). As a result, the development of the technology could immensely affect the students' performance in their learning activities, especially by using the digital devices and the application (Sung et al., 2016).

Moreover, the availability along with the free access of many digital devices and their application could help the teachers in promoting the quality of their teaching and learning activities. By immersing those aspects in the learning process, it will also encourage the students to engage and to involve more in the learning activities (Swain, 2001; Katz & Halpern, 2015). For instance, the existence of a wide range of digital literacies such as mobile phones, the internet, texting, drawing tools, and online and offline games is significantly helpful for

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students in enhancing their understanding of the words, texts, and even the meaning that shown by those digital literacy devices (Mudra, 2020). However, as Indonesia is a developing country, most of the students are still lack of literacy skills, proven by their low habit to read and to write as they have used to (Nuroh & Liansari, 2018). According to Pagani et al. (2016) this will automatically lead them to have the low capability in performing their digital skills in the process of their learning. In addition, another problem that arises is that the lots of locations of schools in Indonesia are in remote areas leading them to have limited access to the internet as well as receiving inadequate digital equipment to support the process of learning activities (Mudra, 2020).

Based on the reasons above, I would like to investigate about what are the challenges that EFL students face in dealing with implementing digital literacy in teaching and learning activities in Indonesia? This essay aims to raise the attention of learners, educators, and policymakers on the topic of challenges in implementing digital literacy in the classroom. This essay will also be significant for the educators to provide more effective teaching strategies to deal with the problems and for the policy makers to address the challenges and provide more supportive tools in some schools located in the rural areas in order to ease the students' learning process in the classroom.

### **Digital Literacy**

Palilonis & Watt (2019) defined digital literacy as the ability to make and share meaning in the various types and formats in order to creating, collaborating, and communicating those aspects to other people in the digital environments and to effectively understand the ways and the situations where those processes could be supported by the technology. In addition, most students nowadays have utilized digital technology to support their learning activities such as reading articles, journals, and e-books, sending email to classmates or tutors, accessing the learning management systems, doing several quizzes, online, and even participating in several forums of discussion (Tang & Chaw, 2016). However, living in a different environment could lead the students to have different issues regarding the use of digital literacy in the classroom, even though they have the awareness about its importance to the learning activities.

### **Use of ICT in the Classroom**

The terms of ICT (Information and Communication Technology) refers to the use of technology as one of the media to attain information in relation to study and also as a tool to communicate effectively applied and used in the teaching and learning activities (Atmanegara et al., 2013). Its implementation in the classroom aims to solve several education problems in various contexts such as the shift from using printed books as the learning material into a digital one (Pepin et al., 2017). Moreover, the Indonesian government has taken serious consideration into the implementation of ICT in the classroom, proven by the juridical foundation of education with law number 14/2005 focusing on the role of teacher mentioned that "Every educator should be able to take advantage of information and communication technology for educational purposes". As a consequence, it is clearly stated that ICT definitely brings a significant role in teaching and learning activities both for students and teachers. However, these significant impacts could vary due to the different backgrounds of the users. The lack of access to the internet and ICT along with inadequate technical supports at schools might hamper the students and the teachers utilizing the ICT in the classroom (Argelagós & Pifarré, 2017; Habibu, 2012). Therefore, these challenges should be considered deeply before applying the use of the ICT process of learning activities (Castaneda et al., 2021).

## **EFL Learning**

EFL learning defines as a learning activity where the teachers are supposed to be able to adapt the lessons creatively with the assistance of complex media in order to reach the learning objectives (Atmanegara et al., 2013). In addition, Durriyah & Zuhdi (2018) stated that the process of material adaptation aims to create effective and relevant lessons to be applied in the classroom. As the purpose of digital inclusion in the classroom is to help the students acquiring knowledge effectively, the adaptation of material should be based on authentic texts and realistic situations. Moreover, in creating English lessons, teachers should integrate the lesson by using web-based resources and include the computer-assisted learning tools creatively (Argelagós & Pifarré, 2017). However, not all teachers and students are capable enough and also familiar with the use of digital sources. As a consequence, there should be further investigation aiming to acknowledge this challenge.

The implementation of digital literacy in the classroom is acutely significant, however, it is known that there are somehow some challenges that students experience when it comes to its implementation (Kuek & Hakkennes, 2020). Therefore, in this essay, I will discuss several challenges that Indonesian learners often face when dealing with the use of digital literacy in the classroom; (1) Limited access and tools; (2) Lack of students' digital literacy; (3) Lack of teachers' digital literacy

In consideration of solving these issues, teachers and policymakers have a vital role to provide students with more effective learning strategies especially those related to digital activities and also support them by providing adequate digital devices to ease them in their learning process. For this reason, I would like to start this essay by discussing those three challenges and doing critical analysis to raise the understanding and the attention of educators and policymakers. Then, it would be followed by the implication which I assume could help educators and policymakers to acknowledge the problems and use this knowledge as their basis to improve the learning activities better. Finally, I will end this essay by conclusion and inserting some references.

## **Challenges of Implementing Digital Literacy in the Classroom**

### ***Limited Access and Tools***

The use of digital technology in the classroom assumed to be able to assist both teachers and learners to effectively perform better in their teaching and learning process. However, the limitation of access and tools significantly becomes one of the barriers preventing them to achieve their success in acquiring the knowledge (Bingimlas, 2009). According to Kimble-Hill et al (2020) students are oftentimes hard to access the lessons and understand it effectively due to the limited access to the internet. In Indonesia where some areas are still far from technology lives, the internet access does not truly help the learners to search content materials used in the classroom. It is due to the limit of the internet and WiFi signals and also the far location from the internet places such as café (Mudra, 2020). In addition, several learners are also disappointed and feel a bit stressed in the school due to they could not find sufficient the internet signal that can reach out to every single location of the school (Argawati & Suryani, 2020).

Moreover, lots of students from remote school areas certainly might feel quite difficult to get the internet access because of the low signals in their place. According to Martínez-Alcala et al. (2021) this aspect then would definitely not allow them to enhance their digital literacy

skills and use them in their learning activities. This statement aligns with a study from Durriyah & Zuhdi (2018) which found that when the students do not have enough access to the internet, then digital literacy skill might get lower among the students. Moreover, it is known that the availability of both financial support issues as well as digital tools support could drive students to gain the high level of digital literacy skills (Voogt et al., 2013). The accessibility of such learning technology either from the availability of the digital devices or its the internet should be equally balanced as it will allow the students to improve their digital literacy skills (Feola, 2016).

Another difficulty that students experience is that feeling overwhelmed due to the lack of the internet access when doing their assignments from school. For example, one of the students as the participant of digital literacy study stated that he found that it was difficult for him to complete the assignment instructed by his teacher in the school due to he did not have enough access to the computer and the internet at his home (Gurung & Rutledge, 2014). He also mentioned that the experience of taking online classes could be a burden for him compared to the offline ones since he is not also familiar with that shift before (Gurung & Rutledge, 2014). As a consequence, this might also drive students to not be able to perform in the online courses as well as a face-to-face class.

Furthermore, condition at educational institutions also becomes one of the challenges, such as its readiness toward implementation of digital literacy in the school; training staffs and teachers about ICT, and providing adequate digital tools (Voogt et al., 2013). Some of the students were also critical in utilizing digital literacy tools in which quite costly such as laptops, mobile phones, digital cameras, iPods for their learning activities (Durriyah & Zuhdi, 2018). For example, when the students were instructed by the teacher to create a group and do the group work together, only one student who has a laptop and uses it together with his groupmates (Argawati & Suryani, 2020). Some students even realize the importance of digital tools for their learning, somehow they also know that those are quite costly, therefore, some of them decided to not depend on those devices to the full for the sake of gaining the information and acquiring digital knowledge from the internet (Mudra, 2020).

### ***Lack of Students' Digital Literacy***

As the impact of the technology inclusion in the classroom, students need to be supported in the way they could improve their critical awareness of power operation in an online environment and how to integrate that critical thinking in their learning activities. If the schools or teachers restrict the students in acquiring knowledge and information online due to the reason of the complexity of there sources and students' incapability to make their own choices and lack of experience as well, then it will be acutely important for the educators to teach them about how the way they browse and select the information critically and be reflective on the ritualization of the digital activities (Bhatt & MacKenzie, 2019). One of the examples of students' lack of digital capability is that some students in Siliwangi college, Indonesia come from different social, educational, and economic backgrounds leading them to have a different level of digital basic knowledge and ability (Argawati & Suryani, 2020). This condition will automatically affect how the way they use the technology for their learning, moreover, by the fact that merely several students are well-equipped with adequate digital tools.

Therefore, due to not all the students are capable of utilizing digital tools in their learning activities, it will lead the students to feel overwhelmed and complicated to browse the content of materials provided on the internet. In addition, some other students also found it was

extremely difficult to interpret the meaning and purpose of the information as well as the materials that they perceived from the web resources (Mudra, 2020). When teachers asked students to browse more references through the internet, they mostly realize that those resources are truly complex and more complicated rather than teachers' instruction in the classroom (Tang & Chaw, 2016). In addition, students claim that some resources they have found on the internet are oftentimes difficult to read and to understand (Burnett, 2011).

Another barrier for students in implementing digital literacy in the classroom is that the capability to understand the complex digital devices. This problem arises due to lack of experiences from the students in using digital tools in the classroom and also they have low understanding and limited comprehension leading the students to have low skills in digital literacy (Voogt et al., 2013). That being said, Atmanegara et al (2013) stated that students need to be able to use digital media in order to comprehend all of the contents from digital resources. Furthermore, lots of students who start to study at schools definitely should improve their skill in learning technology in order to be able to perform better in the learning activities.

Moreover, it would become even worse if the students search for any information without any reflection related to the topics or issues, or tasks that they are searching in the web-based resources. For example, in terms of finding the information online, some high school students have several problems selecting the appropriate search terms driving them to use the general search instead of the specific searching objectives (Argelagós & Pifarré, 2017). Another consideration is that receiving and translating lots of information through emails written in the Norwegian language was time-consuming activity for ENAI (European or North- American International) students as it ends up with the fact that most of the information was irrelevant to them (Habib et al., 2014). As a consequence, the learners will have difficulties in using reliable web sources which appropriate with the topic they are about to know (Walraven et al., 2008).

### ***Lack of Teachers' Digital Literacy***

Another significant aspect in succeeding the goal of education, teachers also need to understand how to use the ICT in the classroom in order to be able to facilitate the students developing their competencies in the 21st century (Voogt et al., 2013). Moreover, in this digital era, teachers and lecturers are hoped to be equipped with sufficient digital devices and applications, such as tabs, laptops, desktop computers, and smartphones. Teachers are also expected to have good digital literacy skills, being able to use the information and communication technology efficiently and effectively, so that they can implement it better in the classroom (Al Seghayer, 2020).

However, some teachers somehow find various difficulties in regard to match the lesson they want to teach with the application that they want to use and also to create some content of learning by using those applications (Argawati & Suryani, 2020). This happened probably because lack of time preparation for creating the lesson that can cover the skills aimed to develop. Several digital devices such as android, gadgets, and laptops were also reported to be complicated tools for teachers in teaching English as they think that those tools consist of several procedures with the complicated operations (Nedungadi et al., 2018; Yildirim et al., 2020).

Besides, dealing with students' different comprehension levels becomes one of the obstacles for teachers in implementing digital literacy in the classroom. It is not only the students who were assumed to experience the lack of digital literacy but also the teachers at some points did have much experience in utilizing digital devices for teaching English (Durriyah & Zuhi,

2018). Furthermore, EFL teachers also reported that they have limited knowledge to read messages, write the texts, and even listen and explain the lesson in which provided online (Mudra, 2020; Renandya & Jacobs, 2016). In short, the teachers' daily routine in which familiar with technology tools, as well as school regulation towards technology inclusion, could be the reasons for the limited knowledge of digital literacy skill (Dusick, 1998).

Nevertheless, the significant aspect is not only about the digital applications in the classroom, but also teachers play a fundamental role in the learning process (Papastergiou, 2009). In other words, the use of technology in the classroom aiming to help the students easier to learn truly depends on the teachers' capability in maximizing the use of those tools in the classroom (Argawati & Suryani, 2020; Wichadee, 2017). As a result, teachers finally could develop their own digital literacy skills for the sake of assisting and encouraging the students to develop their digital literacy as well as their creativity towards the use of the devices and applications in the learning activities.

### ***Implication***

Digital literacy has actually been applied in Indonesia, however, its implementation in the classroom still experiences several problems (Pratolo & Solikhati, 2021). Therefore, by acknowledging the three challenges for students in implementing digital literacy in the classroom discussed in this essay, hopefully, it could raise the attention for the next researchers to investigate more about learning strategies to mitigate the challenge. In addition, as it is known also that the fundamental reason why some students could not perform well in the classroom, especially if it is related to the use of digital literacy is that due to the lack of access as well as the internet connection. Therefore, the policymakers are hoped to pay attention to this problem and could give supportive devices aiming to ease the students' learning activities (Boekaerts, 1997). Besides, several school officials also could work together to hold such digital literacy training to also support the students once they have difficulties in operating digital tools in the class.

In terms of the lack of teachers' digital literacy skills, the educators are supposed to realize more about the importance of having a good understanding of digital literacy skills (Martin & Grudziecki, 2006). That being said, they could prepare the lesson well before they teach the students in the classroom, especially if the lessons are strongly related to the use of digital tools (Glover & Miller, 2001). In addition to it, as regards students' lack of digital literacy skill, learners could receive several digital literacy trainings right before they immerse themselves in the use of if in the learning activities (Lea & Jones, 2011). This simultaneously could sharpen their basic literacy knowledge for then could assist them to perform better in the classroom.

Finally, it is truly recommended for educators, school officials, and also policymakers to be able to work together to mitigate these challenges. According to Isaacs (1993) it could be started by raising the realization then followed by several practical actions that could solve those challenges. For example, the Ministry of Education should provide more digital tools in some institutions located in rural areas. Then, according to Churiyah et al (2020) school officials could also maximize their role by providing digital training and seminars in regard to digital literacy aiming to set the readiness for both teachers and also the students. Last, the educators also could take their role by preparing themselves to be digitally literate before inviting the student to do so.

## Conclusion

To conclude, despite the benefits the students could perceive when they implement the digital literacy skill in their learning activities, there are also some challenges that they face during the learning activities. Those are the lack of the internet access and digital devices and the limited digital literacy skill of both students and teachers. Moreover, as Indonesia is the developing country, most students are still digitally illiterate causing them to not well-prepared when it comes to the use of digital tools in the classroom. That being said, the place where the students live also becomes the major cause of having inadequate digital support from the government. Therefore, there should be further consideration into this problem that should be done by all people in all of the aspects. Not only the government who need to help the students by providing the access, but also the teachers as well as the students should also take a part in acknowledging the issue. Finally, having the realization following up by several practical actions could be the alternatives to reduce the challenges and helping the students more to develop their digital literacy skills and even could perform well in the classroom.

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