



Exploring lecturers and administrative staffs' strategies to hone EFL students' digital literacy

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ABSTRACT

This study seeks to investigate the strategies used by college teachers and administrators in enhancing the digital literacy skills of EFL students. A qualitative study is the research design in this paper. The researchers chose a purposive sampling technique for administering the research sample. There were six EFL lecturers and six higher education admins at STKIP PGRI Bandar Lampung as the research sample. This present research employed semi-structured interviews for collecting the data. This current study analyzed the data qualitatively and described it thematically. The findings illustrated that the lecturer used four strategies for promoting learners' digital literacy; motivate learners, conduct training workshops, employ digital technology in the classroom, and improve the digital classroom environment. Moreover, higher education admins used four strategies; raise guardians' awareness towards the role of digital technology, conduct training for lecturers and learners, redesign the EFL classroom and enhance classroom infrastructure. This finding implies that policymakers can use this research to plan and make a new system for EFL education.



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Presently, the advancements and acceptance of digital technology facilitate a new wave of the industrial revolution. This rising technology propelled new economies in wealthy and developing nations. The advances in digital technologies modify the understanding and definition of literacy. New technologies generate new literacy (Leu et al., 2017). Currently, both lecturers and learners employ digital technologies to conduct teaching-learning activities. Therefore, someone can participate in the learning activity

beyond the time and place (Henderson et al., 2015). The learners can use digital technologies to participate in classroom discussions, such as Edmodo, Schoology, and Google Classroom (Amin et al., 2022). They also can create digital content to promote and expand their learning ability, especially in the L2 context. However, there have been many arguments on digital technologies' effect, use, uptake, role, and value in higher education for the past few years (Alexander et al., 2017). The previous study of the use of digital technology had mainly focused on the development of the necessary attitudes, knowledge, competencies, and skills for lifelong learning, the role in the personal lives of the students, and the improved position of such technology in the knowledge-based culture (Silamut & Petsangsri, 2020).

Some EFL lecturers and learners lack digital competencies because they are not accustomed to using technology (Alakrash et al., 2021). On the other hand, the lecturers can effectively incorporate technology in their teaching-learning activity using digital technology competency standards and adequate training. If the teachers are not ready to understand the most recent skills and information sufficiently, they cannot keep up with the newest technology. They might fall behind and be challenged to master new digital literacies (Tsai et al., 2015). Therefore, it is very much expected to maximize digital technologies and their benefits for the EFL lecturers and higher-education administrators so that they can keep abreast with the technology development (Espino-Díaz et al., 2020).

The learners can acquire vast information through digital technology because of the spread of digital content following the Covid-19 pandemic (Whitelaw et al., 2020). Consequently, the lecturers and learners can protect themselves from lagging in the education process and find out if it is credible and useful by identifying the nature of the information because of the need to master digital literacy skills. However, either lecturers or learners are the person who got affected by the lack of digital literacy after the emergence of Covid-19. Therefore, it will be difficult to access online information because lecturers and students lack digital literacy skills. Students must be competent in using such technologies to use digital technologies in language teaching and learning effectively. The effective exploitation of the digital environment could be achieved if they had mastered digital literacies (Al-Abdullatif et al., 2020).

Digital literacy among students is an important requirement that will determine success in professional and academic life due to the increasing use of digital technology in society (Caena & Redecker, 2019; Castro, 2019). Thus, this technology must be used appropriately and effectively for educational purposes, which are influenced by the teacher's ability. Meanwhile, the agile learning environment and the need for digital skills in the modern era make it imperative that students be digitally literate. Digital literacy is important in

facilitating teachers' and students' various information regarding grammatical patterns, pronunciation, language structures, and linguistic discourse in EFL learning (Kim, 2019). English teachers must be able to improve students' technological competence to deal with these new demands, especially regarding the use of modern digital technology for language learning. On the other hand, school administrators also have an important role in increasing students' digital literacy. However, the efforts of teachers and administrators in increasing students' digital literacy have not been studied, especially in the context of EFL. Thus, the research seeks to overcome the research gap in research that investigates the strategies of teachers and administrators in increasing digital literacy in higher education level environments.

In addition, it is important for English as a Foreign Language (EFL) students to become digitally literate in order to effectively communicate and access information in a globalized world. Technology can be used to reinforce language teaching and learning by providing interactive and multimedia resources, facilitating communication and collaboration among students, and providing personalized and adaptive learning experiences (Kim, 2019). Furthermore, technology can also help to overcome traditional language barriers and provide access to authentic language resources and native speaker interactions. However, it is important for teachers to effectively integrate technology into their instruction and provide guidance for students to use it appropriately.

There are many interrelating ideas and concepts to identify the attitudes, knowledge, and skills people need to utilize digital technology in an increasingly digitized society. It consists of digital skills (Bacalja, 2020), internet knowledge (Santoro et al., 2018), media knowledge (Hobbs, 2017), information knowledge (Drotner & Kobbernagel, 2014), and computer knowledge (Fraillon et al., 2020). However, these ideas and concepts have different connotations when viewed from various scientific disciplines such as culture, education, society, and history. Literacy can be translated as the ability to read and write, "process and apply information to daily activities". On the other hand, literacy is competency-based in an international domain. New ideas can be created when literacy ideas are applied to a digital system known as digital literacy. Digital literacy is the ability to understand and apply information in various media obtained from many sources when presented through digital devices (Chan et al., 2017). Meanwhile, there is a need to think critically and provide reflection in informing online assessments. On the other hand, digital knowledge lies beyond basic technical skills in ICT. Thus, digital literacy is the ability to express ideas related to constructing and writing activities (Blau et al., 2020).

Meanwhile, digital learners have social habits that consist of browsing websites, evaluating the integrity of online resources, participating in social media communities, blogging communities, and blogging (Miller, 2017). In addition, some studies examine the mechanical aspects of digital skills, such as how the functioning of software and hardware should be considered the most important part of social habits (Chan et al., 2017; Lindfors et al., 2021; Whitelaw et al., 2020). Digital literacy has a relationship with computer knowledge which means an understanding of computer applications, capabilities, and characteristics, as well as the ability to apply this knowledge in the productive and skilled use of computers personally. Similarly, the general notion of information proficiency is generally considered to be. The study of digital literacy has an impact on discussing how to be part of a fully digital society. Moreover, digital literacy can foster social awareness regarding cultural understanding and commercial ideology and how technology can be implemented to express information and meaning. In higher education, there have been studies on media literacy and digital literacy (Nedungadi et al., 2018). Meanwhile, the Indonesian government's current policy focuses on developing students' digital competence (Durriyah & Zuhdi, 2018). According to the description of the discussion above, this study uses the idea of digital competence as a research topic to produce findings holistically and comprehensively. On the other hand, competence is a concept that is often associated with aspects of education in Indonesia higher education.

In EFL learning, a previous study examined students' digital literacy competencies and found that students had a minimal understanding of digital literacy. Meanwhile, a study discusses Jordanian students' perceptions of technological competence (Albashtawi & al Bataineh, 2020). The students were shown to have limited competence in technology skills. However, they claimed to have a great deal of experience in basic computer skills, such as installing software, editing data, deleting files, and copying files. Meanwhile, another study examines the views of Iranian EAP students regarding barriers and levels of computer competence in participating in higher education courses (Dashtestani & Hojatpanah, 2020). The findings explain that the computer literacy of EAP students is still minimal. Meanwhile, computer literacy is important in achievement and academic performance among EAP students. On the other hand, Saudi Arabian students are reported to lack sufficient technical competence and cannot use application tools and computer programs effectively (Alhujaylan, 2019). There is a finding that improving students' computer literacy skills must be handled properly because many Saudi institutions have started to adopt LMS as a learning medium.

On the other hand, Nigerian secondary school students still have poor digital literacy levels even though they have attended and been able to complete related digital literacy classes at school (Mabayoje et al., 2016). One of the causes of this problem is the lack of digital resources and facilities in schools. The provision of digital facilities and infrastructure is a way for the community to be enthusiastic about increasing competency and digital literacy in schools. Meanwhile, a survey conducted explains that male students have a higher frequency of using the internet than female students to do schoolwork (Krumsvik, 2014). Temporarily, there are obstacles to increasing students' digital literacy, namely the cost of getting the use of connections that are not affordable.

Based on previous research, students at the high school level with greater computer experience and knowledge outperformed students with lower computer experience and knowledge. Computer knowledge can help students achieve better learning targets to be better prepared to participate in the world of work. Similar research also explained that the digital competency level of school students in Jordan could have a significant influence on achieving learning targets (Albashtawi & al Bataineh, 2020). In addition, instructors must also have a high level of digital literacy to encourage students to develop digital literacy at school. Digital literacy is an important aspect of modern education to help students develop abilities aligned with learning targets (Jalil et al., 2021). However, the development of digital literacy skills can be hampered due to limited time in exploring the use of technology. On the other hand, only a few teachers can use computers for reactive learning activities, such as educational games, to evaluate students' digital competence.

Thus, a review of increasing digital literacy in the context of EFL has provided various references to narrow the scope of research and studies developed according to international trends in facilitating students' digital competence. STKIP-PGRI Bandar Lampung, the location of this research, does not have an ecology for learning and teaching English rich in digital technology. Meanwhile, the lack of supporting literature that discusses the local context is an obstacle in describing how university lecturers and administrators can improve students' digital literacy in EFL classes.

In the preparatory stage of this research, there is an important role that the research review has as an aspect that explains the theoretical background in various fields that is given a fair share of investigations in a harmonious context. That background can provide deep ideas so students can understand and apply digital technology in learning English. Some of the studies cited are the results of relevant studies. They can be used as a reference in comparing the context of this research with other contexts at the local and international levels. For example, research on digital literacy in the Turkish context

(Ozdamar-Keskin et al., 2015), the Iranian context (Alavi et al., 2016), the Saudi Arabian context (Gharawi & Khoja, 2015), the Jordanian context (Albashtawi & al Bataineh, 2020), and the Nigerian context (Mabayoje et al., 2016). Therefore, this study aims to report on various strategies used by English lecturers and administrators in areas that have not yet covered this topic. On the other hand, several previous studies have explained that a non-detailed self-report approach is implemented in examining the extent of this complex problem. On the other hand, this research builds a relationship between English lecturers and administrators in terms of increasing students' digital literacy so that there is a significant positive impact on organizing better EFL learning. The findings of this study are expected to provide implications for developing the insights of students, teachers, parents, and policymakers. In addition, the findings of this study are also expected to act as a reference for integrating digital technology into EFL learning. This study establishes a framework for future studies in research and technology because the research topic is broad.

This research can contribute significantly to the field of research in the aspect of educational technology because researchers have reviewed that there are no other studies that discuss strategies for promoting digital literacy in higher education environments in Indonesian EFL learning, even though currently, the domain of digital literacy is a current topic for technology research education. Efforts to promote digital literacy can significantly influence technology-based learning methodologies so that students can learn actively and collaboratively in integrating technology-based practices in coping with success in the fourth industrial revolution era. Thus, this study seeks to investigate the strategies used by college teachers and administrators in enhancing the digital literacy skills of EFL students. According to the explanation above, the research question in this current study:

1. What are the strategies used by college teachers and administrators in enhancing the digital literacy skills of EFL students?

METHOD

Research Design

Standard thematic analysis is the type of approach used in this qualitative research. Thematic analysis is a research method used to identify and analyze recurring themes in qualitative data. Standard thematic analysis is a systematic, step-by-step process for identifying, coding, and categorizing themes in qualitative data (Peel, 2020). Researchers manually carry out the coding process, consisting of initial coding, connecting coding, determining themes, and evaluating and identifying themes. The goal of standard thematic analysis is to provide a systematic and transparent approach to analyzing qualitative data, which can help to ensure the credibility and rigor of the

results. Researchers use qualitative research because of the flexibility and ability of qualitative research to reflect deeply on respondents' views, complex subjective evaluations, and detailed descriptions of research objectives. This study was conducted at STKIP PGRI Bandar Lampung. Researchers conducted a purposive sampling and decided to use six English lecturers and six college administrators as the participants in this study. Purposive sampling is chosen by researchers because it enables them to target specific subgroups within the population that are of particular interest to their research question, or because they have limited time, resources to the population. Meanwhile, convenience sampling is a technique to determine the sample used by researchers. Table 1 describes the demographic information of the participants.

Table 1. The Demographic Information of the Participants

No	Respondents	Gender	Age	Academic Position	Qualifications	Teaching/ Administration Experience
1.	Respondent 1	Female	34	English Lecturer	MA	10 years
2.	Respondent 2	Male	31	English Lecturer	MEd	7 years
3.	Respondent 3	Female	35	English Lecturer	PhD	11 years
4.	Respondent 4	Male	36	English Lecturer	PhD	11 years
5.	Respondent 5	Female	35	English Lecturer	PhD	10 years
6.	Respondent 6	Male	60	English Lecturer	PhD	35 years
7.	Respondent 7	Male	40	Admin	ME	16 years
8.	Respondent 8	Female	39	Admin	MEd	14 years
9.	Respondent 9	Male	55	Admin	PhD	23 years
10.	Respondent 10	Female	42	Admin	MEd	16 years
11.	Respondent 11	Male	41	Admin	PhD	16 years
12.	Respondent 12	Male	45	Admin	PhD	20 years

Ethical considerations

Ethical considerations are critical when conducting research involving human subjects. Therefore, this current study decided to obtain informed consent, protect participant confidentiality and privacy, minimize potential harm, and consider the potential benefits of the study.

Instruments and Procedures

This study uses interviews as a research instrument. The researcher cites various relevant literature reviews as guideline constructs and interview

procedures. To ensure credibility in carrying out the data collection process, a panel of experts was asked to validate the interview protocol. Researchers conducted face-to-face interviews with six English lecturers and six higher education administrative staff. The face-to-face interview was conducted in November 2022. Each interview was conducted for 30 minutes at STKIP-PGRI Bandar Lampung. There are 20 questions raised to the respondents:

Table 2. The Questions of Strategy for Enhancing Digital Literacy

No	Questions
1.	What role do you think digital literacy plays in the EFL classroom?
2.	How do you incorporate technology into your teaching methods?
3.	Can you give an example of how you use digital resources to support student learning in the EFL classroom?
4.	How do you assess students' digital literacy skills?
5.	What strategies do you use to engage students in online discussions and collaborations?
6.	How do you incorporate digital tools and platforms into your assessment and evaluation process?
7.	How do you address potential digital literacy challenges faced by EFL students?
8.	Have you noticed any changes in the way students learn English with the integration of technology?
9.	How do you support students in developing their digital literacy skills outside of the classroom?
10.	How do you ensure that students are using technology ethically and safely in the EFL classroom?
11.	Can you share any examples of innovative or creative ways you have used technology to enhance students' English language skills?
12.	How do you ensure that students with different levels of digital literacy are supported in the EFL classroom?
13.	How do you collaborate with other teachers and staff to support students' digital literacy?
14.	How do you provide professional development opportunities for teachers to improve their own digital literacy skills?
15.	What role do you think the administration should play in promoting digital literacy among EFL students?
16.	How do you integrate digital literacy into the curriculum and academic programs offered at the institution?
17.	How do you stay up-to-date with the latest technology and digital resources available for EFL teaching and learning?
18.	How do you incorporate multimedia resources and digital storytelling into your teaching methods?
19.	How do you encourage students to critically evaluate the information they encounter online in the EFL classroom?
20.	What do you see as the future of digital literacy in EFL education?

Data Analysis Procedures

The researchers recorded the interview session and transcribed the conversation word for word. The next stage is the coding process. At this

stage, the researcher categorizes and labels the text to describe and identify themes (Creswell, J.W., Clark, 2017). Researchers use the thematic method as a data analysis technique obtained in the interview session. Researchers manually carry out the coding process, consisting of initial coding, connecting coding, determining themes, and evaluating and identifying themes. This research adopts a type theme based on a study developed by Braun et al. (Braun et al., 2014).

FINDINGS

The thematic structure is a reference for researchers in examining patterns that appear in research data. Researchers reported these patterns systematically in coded data. Furthermore, the pattern will be rearranged in a thematic structure. In the interview session, there was a dominant theme; research respondents shared the same feedback where efforts were made to promote digital literacy so that students could keep up with learning styles and not be left behind in the digital era. Lecturer and administrator staff strategies are two types of digital literacy promotion strategies found in interview sessions. On the other hand, the impetus to increase analytical views is also obtained by researchers when presenting findings by citing the results of previous studies as research-supporting information.

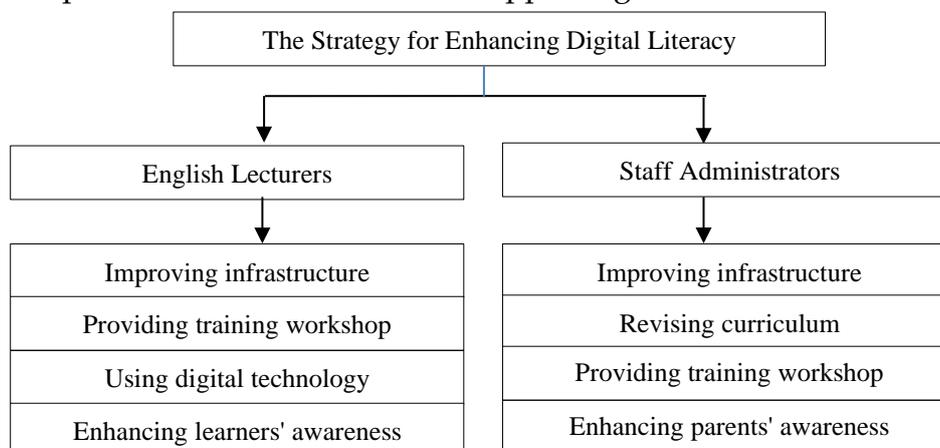


Figure 1. The Strategy for Promoting Learners' Digital Literacy

The researchers analyzed the type of strategy of the English lecturers and staff administrators for promoting learners' digital literacy and how they facilitate the learners to implement technology in their daily activities. There were four sub-themes that researchers found based on the analysis of the in-depth interviews. As stated below, the four sub-themes were linked to strategies employed by lecturers and administrators.

English Lecturers Strategy for Promoting Learners' Digital Literacy *Improving Infrastructure*

A proper infrastructure that facilitates the technology used is one of the ways that English lecturers are stated to expand the learners' digital literacy. Respondent 1 said that:

"I believe that facilities play a crucial role in the development of students' literacy skills. Without proper resources and equipment, it can be difficult for students to fully engage and understand the material. The specific facilities that I believe would be beneficial for students' literacy include having access to a well-stocked library with a variety of books and reading materials, having up-to-date technology such as computers and internet access, digital learning material in the curriculums and having a comfortable and quiet study space. Additionally, having access to writing and grammar software can also be very beneficial for students."

In addition, all English lecturers said that the stakeholders must improve infrastructure so the learners can integrate technology into teaching-learning activities. The stakeholders can equip the higher-education institution with appropriate facilities, such as having access to a well-stocked library with a variety of books and reading materials, having up-to-date technology such as computers and internet access, digital learning material in the curriculums and having a comfortable and quiet study space. English lecturers stated that improving appropriate infrastructures with technology-based and facility can be a proper way to enhance learners' digital literacy.

Providing Training Workshop

After analyzing the data from the interview session, the researchers found that providing a training workshop was the second theme for promoting learners' digital literacy. This finding is in line with the statement from Respondent 2 who said:

"Technology is becoming increasingly integrated into the classroom. Many assignments and projects now require the use of digital tools, and if students don't have the necessary skills, they may struggle to complete them. Additionally, digital literacy is becoming more and more important in the workforce. Employers are looking for individuals who are comfortable using technology and can navigate digital platforms with ease. That's why providing training workshops is a great idea for improving students' digital literacy"

Training can influence the digital literacy of learners and lecturers. For example, the respondents stated that lecturers training and learners training are the two groups that can participate in the workshop. Respondent 2 said that the best strategy for promoting digital literacy is conducting training workshops. Meanwhile, some participants highlighted that digital literacy could be expanded if lecturers and learners join training workshops to

improve their digital competencies. On the other hand, the old lecturers did not prefer integrating technology into their learning activities because they lacked technology experience. It means the policymaker must facilitate the lecturers to be familiar with and improve the learners' digital literacy. Therefore, all the respondents conveyed that both lecturers and learners need to participate in the training workshop to promote learners' digital literacy.

Using digital educational technology in ELT

Using digital educational technology in ELT the third strategies used by English Lecturers for improving students' digital literacy. Respondent 3 said that:

"One technology that I have found to be particularly effective is the use of online language learning platforms, such as Microsoft Office, Prezi, Schoology, Edmodo, Google Classroom, Skype, YouTube, and Zoom. These platforms provide students with a wealth of digital resources, such as videos, audio recordings, and interactive exercises, that can help them develop their language skills. Additionally, these platforms also offer features such as chatbots and language exchange partners, which can help students develop their digital communication skills."

According to the interview, this current study found that English lecturers employed different types of digital technology in ELT. The respondents stated that they utilized one or more digital tools in teaching. For example, most lecturers used Microsoft Office, Prezi, Schoology, Edmodo, Google Classroom, Skype, YouTube, and Zoom. English lecturers in this research stated that they used different educational technologies to facilitate the students' digital literacy. It shows that lecturers employed educational technology massively in teaching during corona pandemic. "Learning by doing" is the slogan of the lecturers when they used LMS as learning media so that the students could access and comprehend the learning material independently. There were two reasons why lecturers used certain categories of technologies in teaching-learning activities, such as promoting learners' digital literacy and enhancing their language skills. Another lecturer said that promoting learners' digital literacy can be achieved by conducting online classes. These views reflected the awareness of the lecturers to conduct online courses as the way to expand learners' digital literacy and as the solution to the problems the learner could face in using technology for teaching-learning activities and how digital literacy could be expanded. Meanwhile, four lecturers stated that they asked the learners to use educational technology for their learning project. This activity reflected that the learners must be responsible for finishing their tasks without the presence of their lectures.

In summary, all lecturers believed that using digital technology with the learners can influence the learners' digital literacy. They can employ

different educational technology categories to facilitate diversity and inclusive learning environments due to the learners' familiarity with technology. Moreover, the lecturers can encourage the learners to employ technologies by assigning grades for digital technologies. They also can share educational information and ask the learners to practice through online classes through educational technology. Therefore, the lecturers should be confident in employing digital technologies and have appropriate digital competencies. Students also must acquire the utilization of digital technology in the learning process.

Enhancing learners' awareness

Enhancing learners' awareness of the importance of using digital technology in ELT is one of the strategies that lecturers use to promote learners' digital literacy. Respondent 4 stated that:

"Sure, by "enhancing learners' awareness" I mean helping students to become more aware of the language they use and how they use it. This includes not only the words they use but also the context in which they use them. For example, a student may know the definition of a word, but they may not be aware of how that word is used in different contexts or how it might be used in different digital platforms. By becoming more aware of these nuances, students can become more proficient in their use of language, which in turn can improve their digital literacy."

The learners already had proper digital literacy in communication and entertainment. Still, they did not know that educational technology plays an important role in achieving learning outcomes. Therefore, building a positive attitude by introducing digital technologies is the first step in preparing learners' digital literacy. This current study found that a high attitude to learning digital literacy can be led by the key role of technology in learning essential skills.

Furthermore, enhancing learners' awareness by motivating them to employ technology can play a pivotal role in expanding learners' digital literacy. Learners must understand the advantages of using digital literacy and facilitate them to develop their competencies as an integral part of their learning process. Therefore, the student's engagement could be expanded if the students prefer using educational technology to using conventional media in ELT activity.

Administrative Staffs Strategies for Facilitating Learners' Digital Literacy

This part describes administrators' strategies to expand learners' digital literacy by using digital technology in the learning activity. This current study found four themes concerning how administrators expand learners' digital literacy based on the interviews' analysis.

Improving infrastructure

In conducting this research, the researchers asked some admins about the steps of their college is taking to improve students' digital literacy. Respondent 7 stated that:

"Absolutely. We must invest in new technology and equipment for our computer labs and library, as well as providing more training and resources for students and faculty to use these tools effectively. By providing students with access to the latest technology and resources, we believe that it will give them the skills and confidence they need to succeed in today's digital world. They will be better equipped to communicate, collaborate, and problem-solve in a digital environment, which will be critical for their future careers"

In addition, some admins stated that the higher education infrastructure was insufficient. As a result, they stated that equipping schools with educational technology facilities are one strategy to facilitate the learners and lecturers using technology. Higher education administrators knew that having appropriate infrastructure can improve the learners' digital competencies to develop their English ability. The institution can provide digital learning materials, augmented reality tools, wide internet coverage, and digital facilitation to support students' use of learning material digitally.

Revising curriculum

Higher education administrators stated that one strategy to increase learners' digital literacy is revising the curriculum to include digital technology learning material.

"Revising the curriculum can greatly improve students' digital literacy by incorporating more technology-based courses and hands-on projects. For example, we can include more online resources and interactive activities in our courses, which can help students to develop their digital skills."

Respondent 8 explained that a new curriculum should be made as the major changes to facilitate the students in expanding their digital competencies in learning English. The curriculum plays an important role in the educational field. Therefore, it should foster the learners to experience the use of technology in learning English. All the admins believed that designing or revising a new curriculum could influence the students' digital literacy to achieve the learning target. Meanwhile, English lecturers also benefit from a technology-based curriculum to expand their learners' literacy.

Providing training workshop

The third strategy to foster learners' digital literacy is training workshops. Respondent 9 stated that:

"At our college, we have been offering training workshops for students for the past few years. The workshops focus on teaching students how to use various

digital tools and platforms effectively and efficiently. We have seen a significant improvement in the students' digital literacy skills as a result of these workshops. One workshop that stood out for me was the one on Google Suite. We taught students how to use Google Docs, Sheets, and Slides for their coursework and research. The students were very engaged and had a lot of questions. They were also able to apply what they learned in the workshop in their classes. We received positive feedback from both the students and their lecturers."

In addition, some admins explained that the institution has a team of experts who are responsible for researching and developing the workshops. They stay up-to-date with the latest technology and trends in digital literacy. They also solicit feedback from students and faculty members to ensure that the workshops are meeting their needs. They have seen a noticeable improvement in the students' digital literacy skills since they started offering training workshops. The workshops have helped students to become more confident and proficient in using digital tools and platforms.

Enhancing parents' awareness

This section describes how administrators perceive parental knowledge of the learners in employing technology. Parents are the most influential person who can support their children to expand their learning abilities, especially digital competencies. This statement is in line with the answer from Respondent 10 who stated that:

"The college years are a critical time for students as they are becoming more independent and taking more responsibility for their own learning. However, parents can still play a vital role in helping their children navigate the digital landscape and develop the skills they need to succeed. For example, if a parent is aware that their child is using digital tools for research and writing papers, they can encourage their child to use those tools responsibly and ethically, such as by properly citing sources and avoiding plagiarism. By staying informed about what their children are doing online and providing guidance, parents can play an important role in helping their children develop the digital literacy skills they need to succeed in college and beyond."

According to the interview above, parents play an important role in helping their children develop digital literacy skills. By enhancing parents' awareness of the importance of digital literacy and the ways in which they can support their children's digital literacy development, parents can improve students' digital literacy skills and equip them with the tools they need to succeed in the digital world. One way to enhance parents' awareness of digital literacy is to provide them with information and resources on the importance of digital literacy and the ways in which they can support their children's digital literacy development. For example, schools can provide parents with

information on the digital literacy skills that students need to have, such as basic computer skills, internet safety, and digital citizenship. Schools can also provide parents with resources such as guides to digital literacy, websites and apps that can be used to support digital literacy development, and tips on how to monitor and manage children's digital use.

DISCUSSION

This current study found some strategies for enhancing learners' digital competencies for English lecturers and higher-education administrators who wanted their students to master integrating technology into the learning process. Facilitating and enhancing awareness of the significance of using technology in the learning environment among learners and parents can expand their motivation to implement educational technologies for achieving learning targets. Meanwhile, the possible challenge to the development of their children's digital competencies relied on the lack of knowledge among parents regarding the utilization of technology for educational purposes. This statement is in line with the previous finding, which stated that there were some obstacles to adopting and implementing technology in higher education institutions (Dashtestani & Hojatpanah, 2020).

According to the findings above, learners' use of technology was supported by social support. It means awareness campaigns in the social influence techniques can encourage constructing a social environment that facilitates learners' digital competencies. Teaching individuals from the wider community can enhance the beneficial impact of digital technology among EFL students. However, research shows that students usually appear to understand digital technology significantly. The current study's findings align with previous research, which explains that social support is an important factor in implementing e-learning (Tsai et al., 2015).

Students do not know the potential of using technology for learning purposes. Thus, applying various formal and informal learning systems in preparing students to use educational technology can be an important and useful strategy. In addition, efforts to increase the awareness of lecturers and parents can be carried out to increase their positive attitude and involvement in using technology as a useful medium. There is an important role the knowledge of parents and teachers has in students' ability to use technology and digital literacy competencies. So, this involvement will affect the development of students in achieving learning targets. Lecturers, school administrators, and parents can work together and discuss raising this awareness. Parents can participate in developing new technology learning competencies and support children in mastering various educational technologies to achieve learning goals (Rinekso et al., 2021).

Learners can explore utilizing digital literacy from their lecturers as an important approach to integrating technology in teaching-learning activities. Lecturers can improve learners' competencies while also facilitating their engagement. They also can participate in training workshops on how to employ technology in the educational platform. This activity aims to strengthen educational projects based on learners' characteristics for comprehending digital knowledge. Educators know that some learners can not participate in the learning activity at the same frequency. This problem can be solved by providing differentiated learning. The capacity of digital literacy can conform to the need of learners as one of the benefits of digital technology. Various student needs can be met by digital technology as a benefit of using this media as a learning tool. There are various categories in integrating digital technology applications, namely the ability to listen, speak, read and write. Each student can complete these activities without worrying about space and time limitations. In learning English, students can constructively continue to a more difficult level so that there is significant progress for students to develop English skills. It is in line with the findings of previous studies, which explained that students' educational performance and progress are strongly influenced by students' digital literacy (Rusydiyah et al., 2020). Some literature in other domains also explains that students can operate effectively in an educational environment if they have adequate digital literacy competencies (Alakrash et al., 2021; Durriyah & Zuhdi, 2018; Kim, 2019; Nedungadi et al., 2018).

The next strategy is to facilitate students to master digital technology because most students do not have capable devices to access digital material. This problem can hinder students' ability to implement the various knowledge they have learned in class because they do not have media resources that can be used in their daily activities. Teachers can inform students about the various technologies that the institutions have prepared so they can access these devices while on campus. In addition, teachers can also inform various technologies found in their surroundings, such as public libraries. Another alternative is that the teacher can recommend students who need to access the device outside the normal learning period. Therefore, this assistance can be used by students who do not have qualified devices to improve digital literacy. Students can improve their digital abilities if they get support from the school and the surrounding environment (Claro et al., 2018).

Improving campus infrastructure is another strategy to improve student literacy skills. Lack of infrastructure generally describes a lack of funds for school administration to build campus facilities and infrastructure, so this is the most difficult approach to be applied. School administration can ask the government to help support campus policies in improving infrastructure. In addition, assistance from parents and the community

through fundraising events is another effort to develop campus infrastructure. The lack of digital devices in classrooms is another obstacle cited by researchers. This finding is in line with the findings of previous studies, which explain that students' digital literacy is low because students have limited access to technology and digital devices in the classroom (Alavi et al., 2016). The researcher found another obstacle: schools' efforts to build learning technology require large expenditures and resources. A survey conducted on lecturers and students is the source of this statement. Thus, the application of technology for EFL students in achieving English learning outcomes has obstacles because there are limitations to school infrastructure.

Adequate training is the last strategy that can be used to increase students' digital literacy. Based on the interview results, students can increase digital literacy if teachers and students receive adequate training in applying technology in EFL learning. This training can also provide up-to-date information with technological advances and new information regarding various digital resources that can be used for EFL learning. Teachers must be competent in using digital technology because it has been proven to help students improve student learning achievement. Teachers are students' greatest learning source and increasing technology use. By utilizing new technology in EFL classrooms, teachers can facilitate students' in developing their English language skills. Higher education is where students must master various educational technologies to use them in the workplace. Thus, the application of new technology in learning can prepare students to get used to accessing various technological devices to support work needs. Thus, adequate training in applying technology in learning is an effort that can be made to develop students' digital literacy (Wahab & Ali, 2020).

CONCLUSION

According to the findings, this current study illustrated that the lecturers used four strategies for promoting learners' digital literacy; motivate learners, conduct training workshops, employ digital technology in the classroom, and improve the digital classroom environment. Moreover, higher education admins used four strategies; raise parents' awareness towards the role of digital technology, conduct training for lecturers and learners, redesign the EFL classroom and enhance classroom infrastructure. This finding implies that policymakers can use this research to plan and make a new system for EFL education.

This research has limitations, such as the number of institutions used as research subjects. Thus, the researcher suggests that the scope for further research can be studied more broadly. In addition, this study only collected data from lecturers and school administration staff, so the researchers suggested that future researchers could collect data from other respondents,

such as students and policymakers. In this current study, researchers only discuss digital literacy as part of the six basic literacy skills so that other researchers can discuss students' financial literacy and cultural literacy in EFL learning. Last suggestion, it is suggested that the future researchers may consider investigating the importance of digital literacy in enhancing language learning skills among EFL students as the topic for next study.

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REFERENCES

- Al-Abdullatif, A., Al-Abdullatif, A., & Gameil, A. (2020). Exploring Students' Knowledge and Practice of Digital Citizenship in Higher... *International Journal of Emerging Technologies in Learning (IJET)*, 15(19), 122-142.
- Alakrash, H. M., Razak, N. A., Khalaf, I., Ogudo, K. A., & Mezhujev, V. (2021). Technology-Based Language Learning: Investigation of Digital Technology and Digital Literacy. *Sustainability 2021, Vol. 13, Page 12304*, 13(21), 12304. <https://doi.org/10.3390/SU132112304>
- Alavi, S. M., Borzabadi, D., & Dashtestani, R. (2016). Computer Literacy in Learning Academic English: Iranian EAP Students' and Instructors' Attitudes and Perspectives. *Teaching English with Technology*, 16(4), 56-77. <http://www.tewtjournal.org>
- Albashtawi, A. H., & al Bataineh, K. B. (2020). The effectiveness of google classroom among EFL students in Jordan: An innovative teaching and learning online platform. *International Journal of Emerging Technologies in Learning*, 15(11), 78-88. <https://doi.org/10.3991/IJET.V15I11.12865>
- Alexander, B., Alexander, B., Becker, S. A., Cummins, M., & Giesinger, C. H. (2017). *Digital Literacy in Higher Education, Part II: An NMC Horizon Project Strategic Brief*. <https://www.learntechlib.org/p/182086/>
- Alhujaylan, H. (2019). An Assessment of the Effectiveness of CALL in Teaching English Language Writing Skills in Saudi Arabia. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.3431731>
- Amin, M., Sibuea, A. M., & Mustaqim, B. (2022). The Effectiveness of Online Learning Using E-Learning During Pandemic Covid-19. *Journal of Education Technology*, 6(2), 247-257. <https://doi.org/10.23887/JET.V6I2.44125>
- Bacalja, A. (2020). Digital writing in the new literacies age: Insights from an online writing community | Literacy Learning : the Middle Years. *Literacy Learning: The Middle Years*, 28(2), 33-43.
- Blau, I., Shamir-Inbal, T., & Avdiel, O. (2020). How does the pedagogical design of a technology-enhanced collaborative academic course

- promote digital literacies, self-regulation, and perceived learning of students? *The Internet and Higher Education*, 45, 100722.
<https://doi.org/10.1016/J.IHEDUC.2019.100722>
- Braun, V., Clarker, V., & Rance, N. (2014). How to use thematic analysis with interview data. In A. Vossler & N. Moller (Eds.), *The Counselling & Psychotherapy Research Handbook*, (pp. 183–197). Sage.
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators (Digcompedu). *European Journal of Education*, 54(3), 356–369. <https://doi.org/10.1111/EJED.12345>
- Castro, R. (2019). Blended learning in higher education: Trends and capabilities. *Education and Information Technologies*, 24(4), 2523–2546.
<https://doi.org/10.1007/S10639-019-09886-3/METRICS>
- Chan, B. S. K., Churchill, D., & Chiu, T. K. F. (2017). Digital Literacy Learning In Higher Education Through Digital Storytelling Approach. *Journal of International Education Research (JIER)*, 13(1), 1–16.
<https://doi.org/10.19030/JIER.V13I1.9907>
- Claro, M., Salinas, A., Cabello-Hutt, T., San Martín, E., Preiss, D. D., Valenzuela, S., & Jara, I. (2018). Teaching in a Digital Environment (TIDE): Defining and measuring teachers' capacity to develop students' digital information and communication skills. *Computers & Education*, 121, 162–174. <https://doi.org/10.1016/J.COMPEDU.2018.03.001>
- Creswell, J.W., Clark, V. L. P. (2017). Designing & conducting mixed methods research + the mixed methods reader. *Designing & Conducting Mixed Methods Research + the Mixed Methods Reader*, 1(2), 24–27.
- Dashtestani, R., & Hojatpanah, S. (2020). Digital literacy of EFL students in a junior high school in Iran: voices of teachers, students and Ministry Directors. <https://doi.org/10.1080/09588221.2020.1744664>, 35(4), 635–665.
<https://doi.org/10.1080/09588221.2020.1744664>
- Drotner, K., & Kobbernagel, C. (2014). Toppling hierarchies? Media and information literacies, ethnicity, and performative media practices. <https://doi.org/10.1080/17439884.2014.964255>, 39(4), 409–428.
<https://doi.org/10.1080/17439884.2014.964255>
- Durriyah, T. L., & Zuhdi, M. (2018). Digital Literacy with EFL Student Teachers: Exploring Indonesian Student Teachers' Initial Perception about Integrating Digital Technologies into a Teaching Unit. *International Journal of Education and Literacy Studies*, 6(3), 53–60.
<https://doi.org/10.7575/aiac.ijels.v.6n.3p.53>
- Espino-Díaz, L., Fernandez-Caminero, G., Hernandez-Lloret, C. M., Gonzalez-Gonzalez, H., & Alvarez-Castillo, J. L. (2020). Analyzing the Impact of COVID-19 on Education Professionals. Toward a Paradigm Shift: ICT and Neuroeducation as a Binomial of Action. *Sustainability*

- 2020, Vol. 12, Page 5646, 12(14), 5646.
<https://doi.org/10.3390/SU12145646>
- Frailon, J. Ed., Ainley, J. Ed., Schulz, W. Ed., Friedman, T. Ed., & Duckworth, D. Ed. (2020). IEA International Computer and Information Literacy Study 2018. Technical Report. *International Association for the Evaluation of Educational Achievement*.
- Gharawi, M. A., & Khoja, M. M. (2015). Assessing Basic Computer Applications' Skills of College-Level Students in Saudi Arabia. *International Journal of Computer and Information Engineering*, 9(4), 1240–1245. <https://doi.org/10.5281/ZENODO.1100396>
- Henderson, M., Selwyn, N., & Aston, R. (2015). What works and why? Student perceptions of 'useful' digital technology in university teaching and learning. <https://doi.org/10.1080/03075079.2015.1007946>, 42(8), 1567–1579. <https://doi.org/10.1080/03075079.2015.1007946>
- Hobbs, R. (2017). Teaching media literacy- yo! Are you hip to this? *Children and the Media*, 103–111. <https://doi.org/10.4324/9781315081380-15/TEACHING-MEDIA-LITERACY>
- Jalil, A., Tohara, T., Shuhidan, S. M., Diana, F., Bahry, S., & Norazmi Bin Nordin, M. (2021). Exploring Digital Literacy Strategies for Students with Special Educational Needs in the Digital Age. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(9), 3345–3358. <https://doi.org/10.17762/TURCOMAT.V12I9.5741>
- Kim, K. T. (2019). The Structural Relationship among Digital Literacy, Learning Strategies, and Core Competencies among South Korean College Students. *Educational Sciences: Theory and Practice*, 19(2), 3–21. <https://doi.org/10.12738/estp.2019.2.001>
- Krumsvik, R. J. (2014). Teacher educators' digital competence. <https://doi.org/10.1080/00313831.2012.726273>, 58(3), 269–280. <https://doi.org/10.1080/00313831.2012.726273>
- Leu, D. J., Kinzer, C. K., Coiro, J., Castek, J., & Henry, L. A. (2017). New Literacies: A Dual-Level Theory of the Changing Nature of Literacy, Instruction, and Assessment. *Journal of Education*, 197(2), 1–18. https://doi.org/10.1177/002205741719700202/ASSET/002205741719700202.FP.PNG_V03
- Lindfors, M., Pettersson, F., & Olofsson, A. D. (2021). Conditions for professional digital competence: the teacher educators' view. <https://doi.org/10.1080/20004508.2021.1890936>, 12(4), 390–409. <https://doi.org/10.1080/20004508.2021.1890936>
- Mabayoje, M. A., Isah, A., Bajeh, A. O., & A., O. R. (2016). An Assessment of ICT Literacy Among Secondary School Students in a Rural Area of Kwara State, Nigeria: A Community Advocacy Approach. *Covenant Journal of Informatics and Communication Technology*, 3(1).

- <https://journals.covenantuniversity.edu.ng/index.php/cjict/article/view/248>
- Miller, R. A. (2017). "My Voice Is Definitely Strongest in Online Communities": Students Using Social Media for Queer and Disability Identity-Making. *Journal of College Student Development*, 58(4), 509–525. <https://doi.org/10.1353/CSD.2017.0040>
- Nedungadi, P. P., Menon, R., Gutjahr, G., Erickson, L., & Raman, R. (2018). Towards an inclusive digital literacy framework for digital India. *Education and Training*, 60(6), 516–528. <https://doi.org/10.1108/ET-03-2018-0061/FULL/XML>
- Ozdamar-Keskin, N., Ozata, F. Z., Banar, K., & Royle, K. (2015). Examining Digital Literacy Competences and Learning Habits of Open and Distance Learners. *Contemporary Educational Technology*, 6(1), 74–90.
- Rinekso, A. B., Rodliyah, R. S., & Pertiwi, I. (2021). Digital literacy practices in tertiary education: A case of EFL postgraduate students. *Studies in English Language and Education*, 8(2), 622–641. <https://doi.org/10.24815/SIELE.V8I2.18863>
- Rusydiyah, E. F., Purwati, E., & Prabowo, A. (2020). HOW TO USE DIGITAL LITERACY AS A LEARNING RESOURCE FOR TEACHER CANDIDATES IN INDONESIA. *Jurnal Cakrawala Pendidikan*, 39(2), 305–318. <https://doi.org/10.21831/cp.v39i2.30551>
- Santoro, G., Vrontis, D., Thrassou, A., & Dezi, L. (2018). The Internet of Things: Building a knowledge management system for open innovation and knowledge management capacity. *Technological Forecasting and Social Change*, 136, 347–354. <https://doi.org/10.1016/J.TECHFORE.2017.02.034>
- Silamut, A. acha, & Petsangsri, S. (2020). Self-directed learning with knowledge management model to enhance digital literacy abilities. *Education and Information Technologies*, 25(6), 4797–4815. <https://doi.org/10.1007/S10639-020-10187-3/METRICS>
- Tsai, H. Y. S., Shillair, R., & Cotten, S. R. (2015). Social Support and "Playing Around." <https://doi.org/10.1177/0733464815609440>, 36(1), 29–55. <https://doi.org/10.1177/0733464815609440>
- Wahab, A., & Ali, W. (2020). Online and Remote Learning in Higher Education Institutes: A Necessity in Light of COVID-19 Pandemic. *Higher Education Studies*, 10(3), 16–25. <https://doi.org/10.5539/hes.v10n3p16>
- Whitelaw, S., Mamas, M. A., Topol, E., & van Spall, H. G. C. (2020). Applications of digital technology in COVID-19 pandemic planning and response. *The Lancet Digital Health*, 2(8), e435–e440. [https://doi.org/10.1016/S2589-7500\(20\)30142-4](https://doi.org/10.1016/S2589-7500(20)30142-4)

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