

## An Analysis of EFL Students' Digital Literacy Competence

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**Abstract:** In the modern era as it is today, technology is increasingly advanced and growing rapidly. Students must certainly have digital literacy skills in facing this fast-changing era. Digital literacy has a lot of coverage to which the students can use it as a media and learning resource. This research aimed to investigate the profile of the EFL students' digital literacy competence. The research method used was case study with qualitative approach. The population in this study were the students of the English Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Cirebon in the 4th semester, totaling 21 people. The research sample taken were 12 people. The data were collected by using observation, digital literacy competence questionnaire, and unstructured interview. The result showed that in general the respondents were categorized as having good competence in the aspects of ICT literacy and media literacy. Meanwhile, in the aspect of information literacy the respondents were in the acceptable category. Furthermore, based on the results of data analysis of the interview results, it was found that even though they were good in the two aspects of digital literacy, and acceptable in competence of information literacy, they confessed that they tended not to practice the competence of ICT literacy in learning activities.

**Keywords:** Digital Literacy Competence, EFL Students, ICT.

### INTRODUCTION

In the modern era as it is today, technology is increasingly advanced and growing rapidly. Almost all people use technology in the fields of communication, transportation, data security, and so on. This tendency happened since technology has a very broad meaning and use. To take it further, nowadays, technological development can even be utilized in the field of education, especially in the implementation of teaching and learning activities to achieve the stipulated educational goals. This phenomenon has greatly affected the education in Indonesian context especially after the pandemic strike. At the time of Pandemic Covid-19 almost all of the face-to-face learning activities are switched to online learning. In online learning, both teachers and students cannot interact directly, this certainly hinders the prospect of the teacher to getting know and familiar of their students' ability and difficulty in mastering the lessons. This phenomenon also indicates that now the students are required to have skills in integrating technology into learning activities so that it could assist them to master the lesson even though there was an absence of teachers' presence. Technology-integrated education certainly needs to be supported by various elements of education, especially for students. Therefore, students need to have skills in the field of media, information, and ICT that are summarized in one skill called digital literacy.

Digital literacy competence has a very prosperous changes to be introduced to the EFL students in the teaching and learning process as they are considered as the millennials who are more prepared and open to

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accepting and utilizing technology as a learning media. According to Hague and Payton [1] digital literacy is an important thing for all young people in an increasingly digital culture. One of the challenges is how a student uses digital literacy wisely as a learning media. According to Paul Gilster [2], digital literacy is the ability to understand and use the information from another sources. This information sources can be accessed by the use of computer. Furthermore, Özden [3] stated that digital literacy can be determined as the skill to receive information from a digital format. In this day and age, technology is increasingly advanced, anything can be done through digital literacy, including receiving information. In addition, Bawden [4] stated, although it is not necessary to cover all of them, digital literacy is a framework for integrating several literacy and other skills.

Competence is a person's ability to include knowledge, skills, and attitudes, which can be realized as the result of real work that benefits themselves and their environment. In this modern era, basic competence in a digital concepts is crucial. In this context, every student need to be able to access, analyze, create, and do the reflection, and act using various digital devices, as a form of expression and strategy in communicating with the teachers. Furthermore, the students must be able to operate digital literacy in this pandemic era so as to support the learning process. The competencies in digital concept involve the students' ability to process various information, understand messages, and communicate effectively with others in various forms, this includes proficiency in using applications that support learning, proficiency in using applications to create creative and positive content to support learning creativity. EFL students can be said to be digital users because they use technology such as smartphones, and laptops as a medium to connect with digital media such as Google Meet, and Zoom. In this era, EFL students need to have the knowledge and ability to use digital media or commonly called digital literacy skills.

Meanwhile, literacy has also a wide concept. According to Hobbs [5], for instance, literacy covers three dimensions. These are media literacy, information literacy, and digital literacy. These three most prevailing concepts of literacy focus on a critical approach to media messages that can be used in the EFL classroom. Hobbs [5] further indicates that there are several ways or components that can be used in order to measure the students' competency in these areas of literacy such as that using direct observation or by using measurement. Meanwhile, according to Adeoye & Adeoye [6] technology literacy is the ability to effectively use technology to access, evaluate, integrate, create and communicate information to enhance the learning process through problem-solving and critical thinking. This concept is also intertwined with that of learning media literacy as media literacy is widely recognized as the people's ability to access, analyze, evaluate and create media in a variety of formats. Lastly, the term literacy also closely related with the concept of information literacy. In this case, the information literacy is determined as the ability to recognize to which certain information is needed and have the ability to locate, evaluate, and use effectively the needed information as stated by Buckingham [7].

The low description on the information of the EFL students' competence in using digital literacy as a learning media is recognized as the biggest challenge in this modern era. Therefore, research is continuously conducted to investigate it. The research conducted by Eryansyah et al (2019) [8], for instance, shows that the EFL students' current level of digital literacy was categorized as low. There were several factors which cause this tendency to happen. Some of the factors were the limited use of ICT applications as a tool for language learning and limited access to computers and internet applications on campus. In addition, Makunja [9] finds that there are some the challenges that the students may face in utilizing digital literacy. The challenges involve the low ability of the teachers to integrate it in the teaching and learning process. Meanwhile, Aprianti [10] stated that Indonesian teachers were found to use ICT quite intensively for the

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purpose of their professional development and as the result this tendency should actually had beneficial effect in the use of ICT for the purpose of teaching and learning with their students. Furthermore, Aprianti and Winarto [11] also indicate that in Indonesian context, several learning platforms such as that of learning portfolio has widely been integrated with ICT (e-portfolio) not only that in higher education but also almost in all level of education including elementary level. This integration is surely required certain degree of digital competency of the students as the user. Although the research has shown the widely recognized used of ICT and digital competency in foreign language learning, yet in fact, there is still a low level of digital literacy owned by the EFL students, both in the fields of media literacy, information literacy, and ICT literacy in Indonesian context, therefore, this issue is wort to be further investigated.

Considering that digital literacy is very important in this all-digital era, especially among students as support in learning activities, digital literacy skills must be developed in order to improve the quality of oneself in this all-digital era. Some researchers focus on digital literacy skills in aspect of ICT literacy. Therefore, the researcher intends to conduct this study by examining three components at once. Based on the problems that have been described, the purpose of the study is to find out how are EFL students' digital literacy competence of the English Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Cirebon in the 4th semester in three digital literacy competence namely; ICT literacy, media literacy, and information literacy.

## METHOD

This study uses a case study as a research design with qualitative approach. According to Creswell [14] Case study are research strategies to carefully investigate something with the collection of complete information using various data collection procedures. The instrument used observation, questionnaire and deep interview to make sure the statements they answer in the questionnaire are appropriate.

There are three dimensions as a measuring tool for conducting research, including; ICT literacy, media literacy and information literacy. The research was conducted online because it adapted to the conditions in 4th semester. After the researchers has finished collecting the data, the researchers analyzes the data using the method proposed by Miles and Huberman [15]. Analysis is carried out by reducing data by simplifying the data to suit needs, followed by presenting data, and making conclusions. The population in this research were all 4th semester active students of English Education Study Program, Faculty of Teacher Training and Education totally 21 students. The sample the researchers use are 12 students. The reason for choosing the sample because they met the criteria in this research.

## RESULTS AND DISCUSSION

The results of this study are presented in the three indicators of digital literacy competence, namely competence of ICT literacy; competence in media literacy; and information literacy. The results are described as follows.

### Information and Communication Technology (ICT) Literacy

ICT literacy is the ability to use technology to acces, evaluate, integrate, create and communicate information to enhance the learning process through problem-solving and critical thinking. Based on the results of the research conducted, the EFL students' digital literacy competence in ICT literacy is as follows.

Observation Results

Researchers conducted research through online learning when EFL students were presenting in one of the courses using Google Meet as a digital media. Based on research observations, it was found that EFL students can participate in learning activities using digital devices quite good, and are able to run PowerPoint software well. EFL students can share presentation screens and design PowerPoint slides.

Table 1. Information and Communication Technology (ICT) Literacy

Learning Stages	Digital Media / Basic Software	Result
Pre Activity	E-learning	At the beginning of the lesson, the EFL students tend to use E-learning to access the absence form. At this stage all of the EFL students showed the ability to use it properly.
	Google Meet	Students learn using Google Meet as a media to take part in learning. At this stage all of the EFL students showed the ability to operate digital media properly.
While Activity	Microsoft PowerPoint	EFL students use basic software like Microsoft PowerPoint to do presentation. In this stage EFL students have no difficulty in sharing PowerPoint slides and doing presentation.
	Google Meet	EFL students can take part in learning using Google Meet until the end of learning.

Based on the data obtained, it can be seen that EFL students found good in ICT literacy competence. All EFL students can participate in learning activities through Google Meet and can access E-learning as a digital media, and also operate basic software such as Microsoft PowerPoint to make presentation using digital devices.

Questionnaire Results

Table 2 presents the results of the questionnaire assessment on the ICT literacy competence:

Table 2. Information and Communication Technology (ICT) Literacy

No.	Statement	1	2
1.	Operate digital device such as computer, laptop or computer	95,2%	4,8%
2.	Only use book for support online learning	85,7%	14,3%
3.	Able to submit college assignments with various formats	100%	0
4.	Able to use electronic dictionary	95,2%	4,8%
5.	Only use book dictionary	9,5%	90,5%
6.	Able to use digital media like E-learning, Zoom, Google Meet	100%	0
7.	Submit college assignments through digital media	100%	0
8.	Always ask friends first how to submit college assignments	42,9%	57,1%
9.	Download learning material	85,7%	14,3%
10.	Not understand what website is	4,8%	95,2%
11.	Download learning application / learning software	100%	0
12.	Do not understand how to download application / software	9,5%	90,5%
13.	Find information through internet	95,2%	4,8%

14. Share information	95,2%	4,8%
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Description: 1 = Yes; 2 = No

Based on the data obtained, it can be seen that EFL students found good in almost all aspects of ICT literacy competence. The data shows that students have competence in using digital devices, able to use digital media, and also in using the internet as a support for learning activities. It can be concluded that EFL students have good abilities in ICT literacy. However, the interviews found out that the EFL students have competence in using digital devices, but they only use them when the lecture starts, work on assignments, and for submit the assignments.

### Media Literacy

Media literacy is the ability to acces, enjoy, interpret, analyze, produce, and evaluate messages in all varieties and combinations of print, visual and digital formats (Glister, 1997). This can helps students to understand the primary function of the hardware components of the computer media they have. Based on the results of the research conducted, the EFL students' digital literacy competence in media literacy is as follows.

### Observation Results

Based on the results of the research observation in media literacy competence, EFL students can communicate information well, but not analyze the information obtained in advance.

Table 3. Media Literacy

Media / Software	Result
Microsoft PowerPoint	The PowerPoint design used when the presentation starts is very attractive. In this stage, EFL students can use and display the PowerPoint slides well.
Take, edit, and record digital photo and video	EFL students are able to edit with a variety of video and photo editing applications using digital devices. In this stage, EFL students should use the media.
Information	When making presentations, EFL students are able to communicate information obtained through the media well, but cannot analyze the information obtained.

Based on the data obtained and presented in Table 3, it can be seen that EFL students found good in media literacy competence. In this observation, EFL students when doing a presentation simply read what is on the PowerPoint slides without adding other information or first analyzing the information.

### Questionnaire Results

Table 4 presents the results of the questionnaire assessment on the media literacy competence:

Table 4. Media Literacy

No.	Statement	1	2
1.	Understand main functions of hardware components on digital device	66,7%	33,3%
2.	Ability operate basic software like MS. Word, MS. PowerPoint	76,2%	23,8%
3.	Cannot operate basic software	14,3%	85,7%
4.	Ability to change computer screen	95,2%	4,8%
5.	Ability to take, edit, and record digital photos and videos	100%	0
6.	Ability to use keyboard shortcuts	85,7%	14,3%

7.	Understand the purpose of the information delivered in internet	85,7%	14,3%
8.	Do not understand the information delivered in internet	28,6%	71,4%

Description: 1= Yes; 2 = No

Based on the data obtained, it can be seen that EFL students found good in media literacy competence. Their answer in positive statements which contains a statement about the ability to media literacy worth 75%, while negative statements have a value of 25%. It can be concluded that EFL students have good abilities in media literacy. In interviews, researchers found EFL students were still unable to distinguish the official website when searching for information.

### Information Literacy

Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information (Warchauer et al., 2010). This competency is not necessarily possessed by EFL students, but also everyone must have this competency. Nowadays, information is not only obtained in newspapers, but the internet is very scattered with various kinds of information. Based on the results of the research conducted, the EFL students' digital literacy competence in information literacy is as follows.

### Observation Results

Based on the results of the research observation in media literacy competence, EFL students can search for information about the material to be presented via the internet. It is difficult to analyze through the internet regarding the websites visited for information search.

### Questionnaire Results

Table 5 presents the results of the questionnaire assessment on the information literacy competence:

Table 5. Information Literacy

No.	Statement	1	2
1.	Able to analyze information in internet	19%	81%
2.	Never analyze first to ensure the information in internet	85,7%	14.3%
3.	Can distinguish the source of factual information or not	14,3%	85,7%
4.	Always use digital devices to find information	90,5%	9,5%
5.	Using newspapers or books as a source to find information	38,1%	61,9%
6.	Able to quickly get the information	95,2%	4,8%
7.	Able to convey information briefly and clearly	95,2%	4,8%

Description: 1= Yes; 2 = No

Based on the data obtained, it can be seen that EFL students found in acceptable in media literacy. It can be seen in the data obtained, that EFL students did not analyze in advance the information obtained, there were 81% of the questionnaire answers in the first statement they answered "No". And followed by statement number 3 that they cannot distinguish between sources of information that are factual and not, there are 85.7% of "No" answers. The interview results showed that EFL students felt at a loss to determine the source of information, especially from the internet.

## CONCLUSION

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Based on the result of research that has been done shows that EFL students' digital literacy competence tend to be good, although one of the competencies is acceptable in information literacy competence. As EFL students living in a modern and digital era, EFL students should master and utilize existing technology. As is known, digital literacy is very important in this era, especially in the era of education. In addition, EFL students should be able to analyze and evaluate information contained on the internet, be able to distinguish between websites that contain factual information.

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