

# EXPLORING EFL STUDENTS' LITERACY PRACTICES IN THE ERA OF ONLINE LEARNING

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#### **Abstract:**

The shift of learning mode from offline to online as the effect of Pandemic Covid -19 provides more experience about literacy to EFL students. Literacy which is formerly defined as the ability to read and write, has myriad definitions including the ability to use digital media for learning. EFL students nowadays are said as digital native and are assumed as familiar with digital media. The present study intends to explore the EFL students' digital literacy practices and the contribution of digital technology toward students' learning. The findings show that EFL students use digital media for some purposes such as learning, working part time, seeking new information, and some others. They are familiar and able to use various types of social media, digital photographs, mobile apps, mp 4 audio, software video sharing, virtual reality, augmented reality, and podcast. The frequent uses of digital media contribute to the students' learning by increasing their thinking capability, helping them control their emotion, and supporting their interaction with their friends. The outcome of students' digital literacy practices emerge in various form like short stories, novel, photograph, advertisement, classroom assignment, educational video, picture, animation and some other products that support learning.

Keywords: EFL students, Digital Literacy Practices, Online Learning

# INTRODUCTION

Issue on literacy sparks never-ending discussions among practitioners in education. Long time the concept of literacy is limited to the ability to read and write. A person is considered as literate if s/he can understand a text and write it as well. However, understanding and writing text is a complicated that required different kinds of skills. To understand a text, for example, a person needs to be able to look things in the dictionary, understand the meaning and relationship between words, and interpret the spatial lay out in the text. The same complicated processes also happen in the process of writing. Reading and writing, therefore, involve the process of decoding and encoding meaning..

Literacy, however, is more than making meaning but it is about how to maintain interpersonal relationship and make social meaning. Literacy is defined as a way to relate people, a way to show who we are, a way to solve problem, and a way to develop ideas (Jones & Hafner, 2012, p. 13). Another definition of literacy is the ability to acquire information and use it purposefully for study, work or daily life (Leung, Xie, Geng, & Pun, 2019, p.v.). The concept of literacy, however, extends due to the outbreak of Covid-19 pandemic. People in the world are expected to reduce direct physical contact and to be more aware to their hygiene.

In education, there is a revolution where the schooling is dependent to technology. The interaction between teacher-student and student-students are limited to using technology, then. The stakeholders in education are forced to be literate in using technology. Teachers must be able to utilize various online platforms in teaching. At the same time, parents must also be familiar with the platforms used in teaching and learning process since their children are dependent to them. The role of teacher, at some points, is taken over by the parents as learning activities are done at home. In such case, the concept of

literacy expands to the utilization of technology to support learning. Literacy is not only limited to reading and writing but also the ability to use technology to access information and evaluate information.

The varieties of literacy nowadays develop rapidly including digital media literacy (Buckingham, 2007), visual literacy (Felten, 2008) multi modal literacy (Mills & Unsworth, 2017), digital literacy (Hobbs, 2017), and social media literacy (Rheingold, 2010). Such development requires educators to put literacy as the primary concern in their educational practices. Meanwhile, learners should take the advantage of this fast development to support their learning in across all disciplines.

Various perspectives underlie the literacy practices. First, from ecological point of view, literacy can be contextual (how practices enacted in different contexts) and mediational (the use of medium in literacy practice). Views on context and media put importance points on types of literacy activities given to the students like as shared book reading, maternal book reading strategies, child's enjoyment reading, and maternal sensitivity (Roberts, Jergens, & Burchinal, 2005), home literacy practices (Hashimoto & Lee, 2011), Hood & Conlon (2008), (Syverson, 2008), and early literacy development (Marsh, 2004). Second perspective, in term of modality, learners practice their literacy activities through electronic and print. Buckingham (2007) states that print literacy is a matter of whether the people know enough about media and technology to be able to function in society at basic level.

Within the context of online learning in the new era, investigating EFL students' practices is worth doing in order to uncover their creative activities that can increase literacies specifically digital literacies. To be specific, the present investigation is done to answer the following questions: What literacy activities are practiced by the EFL students during online learning? what are the modalities employed by the EFL students in their literacy practices?, and what are the contributions of

digital media in shaping students' literacy?

## LITERATURE REVIEW

Issue about literacy is not the new at all and the same is also true with the of illiteracy. Before Indonesia declares its independence or we call it during the Dutch colonization, the number of people who can read and write are very little. More than 90% of the people are

illiterate, with a small percentage of people who are literate with Arabic. Those who learn religious teachings usually can read text written in Arabic. In this modern era, industrial revolution 4.0, the number of illiterate people still moderately exist in our nation. The data from the Office of National Statistics show that in 2021 the number of illiteracy is 3.98 % (BPS, 2022). Such data should increase the compassion of the academic societies in this nation to formulate the strategies to eliminate the basic illiteracy problems.

Literacy does not simply mean acquiring the skills or reading and writing skills, be successful in examination, and being able to operate computers. Hobbs (2017) states that definition of literacy that refers simply to abilities to read and write is inadequate in that it does not give a sense of the content or purposes of the reading and writing, nor does it indicate how these purposes and goals vary in relation to the individuals within unique societal groups. Literacy means the ability or competence to locate information, understand the information, and create communication in a variety of contexts. To do so, it requires access toward the available technology and associated application/software. It also includes the ability to regulate (or self- regulate) access, for example, by being aware of potential risks, and using regulatory mechanisms and systems of guidance. Literacy is truly related to the question of who owns and controls information, and the means by which it is generated and distributed.

Studies on literacy include vast areas and reveal various results

such as how multilingual practices reflect literacy acquisition in natural linguistics context (D'Agostino & Mocciaro, 2021) and home literacy practices assisted by parents can support children's literacy development especially in writing (Puranik, Phillips, Lonigan, & Gibson, 2018). Gender is also seen as a contributive factor on the different literacy achievement where girl usually outscored boys in every aspect of literacy (Unlusoy, De Haan, Leseman, & Kruistum, 2010). In online writing class, the students adaptively transferred practices from distant, recent, and immediate contexts in response to emergent learning and communication needs (Wu, 2020). At the tertiary level, literacy is still considered as challenge and students still find difficulties in understanding the author's message, distinguishing fact from opinion, guessing meaning from contexts, and making inference (Kaur & Kaur Sidhu, 2014). An alternative to promote students' literacy is proposed by Aghaei, Lie, Noor, & Rajabi (2014) who find the effectiveness of using Theater Reading in reading class. Chen, Kuo, & Hsieh (2019) proposes an alternative to encourage literacy practices that is by using online platform.

Digital media literacy has four broad concepts. Buckingham (2007) emphasizes that these four concepts can be used to map the field despite the raise of new questions and new method of investigation. The first concept is representation. Like any other media, digital media represent the world, not only reflect it. Digital media offers interpretation and thus exemplify values and ideologies. The second is language. A literate person does not only understand language but also how a language works. This includes how grammar and vocabulary are combined to create new meaning. The third is production. Literacy includes understanding who is communicating to whom and the reason for making it. Digital literacy involve an awareness of the commercial and non commercial influence that appear while accessing digital media. The fourth is audience. Literacy involves

an awareness of the position of becoming readers or audience. It embraces the understanding of information is intended to whom and how different audience respond differently toward the information. Further, Buckingham states that using digital media for learning means much more than accessing the digital media but using the media for learning and producing the outcome of learning as well.

The students who experience learning during the Covid-19 outbreak are categorized as generation Z. Generation Z is also call as C generation. This expression come from 'connected' which means connected to internet. C means also computerized, connecting, clicking, community-oriented, and changing (Dolot, 2018). Gen Z is characterized as professionally active. They can switch their function from virtual and real world. As a consequence, they can easily source and check information they need. Gen Z identify themselves as professionally active as represented by their lifestyle and life decision that make them become mature (Dolot, 2018). Gen Z also identify themselves as good communicator as they can do bidirectional communication by liking, commenting, and suggesting through social media.

Digital media has contribution to the students' literacy through some ways. First, digital media can foster students' thinking ability. The growth of digital cultures drives the use of digital tools and resource in education. The use of digital media has a close relationshipp with psychological aspect the students. In this context, it deals with the ability in controlling emotion. Some literatures show there is a negative impact of the technology engagement toward students' psychological well-being. However, a study by Yunos & Din(2019)shed a light that there is no significant association between the use of digital technology and emotional state.

## **METHOD**

The present study is aimed at exploring the students' digital literacy practices during their online learning processes. The detailed information about research method employed to answer the research questions can be seen in the following description.

# Design

The present research intended to explore EFL students' literacy practices during online learning era. The massive use of online learning during Pandemic Covid 19 stimulates the students' digital literacy. They use various digital media for learning or doing assignment. In addition, since they have much spare time there is an increase of using digital media for enjoyment. Employing a survey design, the present research aimed at portraying students the EFL students' activities at home that support their literacy development, figuring out modalities that support the literacy activities and describing the contribution of digital media in shaping students' literacy.

# Respondents

The number of the population is 400 students who are at the third and fifth semester at English Department in UIN Sayyid Ali Rahmatullah Tulungagung, East Java, Indonesia. Since the researcher cannot identify all the students, so population defined here is the sampling frame or the target population. The sampling frame in this research are 87 students who take English Curriculum and Syllabus Design and Contemporary English Language Teaching Method classes. These groups of students experience online classes from the beginning of their study since they are registered in the Department in the Covid-19 pandemic.

#### **Instruments**

The data collection is done by employing an instrument, namely questionnaires. The questions are about the activities of digital literacy

practice, the modalities used in accessing digital media, and the contribution of digital media in shaping literacy.

# **Data Analysis**

The data analysis uses descriptive statistic which measure the tendency and frequency of the students' answers.

#### FINDINGS AND DISCUSSIONS

The findings of the present research reveals that various literacy activities were practiced by EFL students either through controlled practices in the various online modes or independent practices by using various application and software. The students' practices has come up with creative products supportive for learning and even money producing. With the help of technology, EFL students get chance to make money by doing part time online business, for example, by writing short stories and posted in sites through which they were paid based on the number of the reader of the stories. However, not all EFL students apprehend the benefit of using digital media. The media are only used for enjoyment, indeed. The following is the detailed discussion of each finding in the research

# **Literacy Practices during Online Learning**

The subjects of the present research were the third and the fifth semester students of English Department at State Islamic University (Universitas Islam Negeri /UIN) Sayyid Ali Rahmatullah Tulungagung, East Java, Indonesia. The range of the students' ages were 18-21 years old. It means that they were born between 2003-2001 and categorized as generation Z. Generation Z has some other terms such as I-generation, Gen Tech, Online generation, Post Millenials, Facebook Generation, Switchers, and Clicking generation (Dolot, 2018).

Generation Z are characterized as easy to switch from virtual to real world or vice versa. Some studies characterize that Generation Z can easily achieve spectacular career without any effort. It is difficult for them to face the vision of long lasting professional career development by means of small step. As clicking generation, they are very familiar with technology and thus, use the technology for learning especially language learning. Selecting them as the subject of research about how they develop their literacy, in this case digital literacy, provide rich information as well as profile of their learning.

This fact is in line with Dolot's (2018) research which identifies the characteristics of Gen Z as professionally active, understand feedback from someone who delegate the task, more mobile, and however, cannot concentrate on one thing. However, a contradictory fact showed that actually not all the generation are knowledgeable about digital media. Research shows that their readiness to use technology is high but the level of knowledge in using technology is low (Yunos & Din, 2019). Similar fact also exists among the subject. Among 87 students, 82 students are familiar with social media but only 3 students are familiar with more advanced technology like augmented reality or hologram. The detailed number of students' familiarity of digital media is presented in the following table.

Table 1. The percentage of students' familiarity to digital media

Type of Digital Media	Number of Students	Percentage
Digital Photographs	15	17.2
E-Books	45	51.7
Mobile Apps	37	42.5
MP4 Audio	44	50.6
Websites and blogs	45	51.7
Holograms	1	1.1
Social Media (Facebook, Twitter, etc)	82	94.3
Software video sharing	13	14.9
Software video streaming	23	26.4

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Virtual Reality	8	9.2
Augmented Reality	3	3.4
Podcast	35	40.2

The generation Z is known to be familiar to various kinds of digital media. The data above show that mostly they are familiar with social media such as Facebook, Twitter, Instagram, or Tiktok. 94,3% of the students have account on such kind of platforms. These facts confirm the findings of previous research by Suwana, Pramiyanti, Mayangsari, Nuraeni, & Firdaus (2020) which reveal that the most commonly used digital media by Generation Z are Whatsapp, Instagram, and Youtube. Social media contain materials for learning and the users can also create the materials by using such media. In relation to literacy practices, the students used the social media to create some contents about English for example video containing speaking practices uploaded in Youtube or various text types uploaded in Tiktok. Such kinds of activities do not only provide enjoyment, but also increase students' literacy because the students are encouraged to search the topic and the learning materials.

As EFL students, a lot of activities should be carried out to develop their literacy. In addition to social media, the EFL students are also familiar to some platforms such E- books, Mp4 audio, Digital photographs, and Mobile apps. This situation showed the evidence digital media ease the interaction between the students and the learning materials. Jones & Hafner (2012:35) explain that digital media provide writers and their readers with the ability with texts in ways they were previously impossible or difficult to practice. For instance, when a reader reads a text and s/he finds some mistakes in the writing s/he cannot contact the writer and give comments on the writing but in the era of industrial revolution 4.0, the reader can give corrective feedback directly by writing the comments in the comment column. Even though the number of them are not many, the EFL students are

familiar with new trend in digital media such as augmented reality and virtual reality. As the generation Z. familiarity to various kinds of digital media is a common sense. New technology is their natural environment to grow up. Their literacy practices are supported fully by the existence of various digital media. The expectation is literacy development also runs naturally in a supportive atmosphere.

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Purpose	Percentage
Learning	53%
Working	25,3%
Fun	18,7%

1,5%

1,5%

Table 2. The students' purpose in accessing digital media

**Exploration** 

Looking for information

The use of digital media is done in a myriad of purposes. The data show that mostly they access digital for learning. In the era of online learning, the main purpose for accessing digital media is for learning, of course. All the activities in learning are done online. The high needs of using digital media such laptop and handphone along with internet connection unconsciously develop their digital literacy. The variety of learning modes becomes their close friend that accompany their learning. Discussions on digital literacy places emphasis on information. It concerns with locating, using, evaluating, and producing information. Buckingham (2007:45) state that with the development of technology the boundaries between information and media have increasingly been blurred. In most leisure time, children access computer more than as a device for retrieving information; they convey images and fantasies, provide opportunities for imaginative self-expression and play, and serve as a medium through which intimate personal relationships are done.

Another finding of the present research shows that the students

use digital media for enjoyment. For the generation Z, technology is part of the day-to-day life and environment, thus in every moment of their life they deal with technology including for entertaining themselves. The finding is in line with Dolot's (2018) notes on the characteristics of Generation Z. According to Dolot, young people, using internet or especially social media get used to liking different things, commenting on reality, evaluating what they but and use and where they spend time. The Gen Z have got used to be expressive on everything. They give and at the same time they expect feedback because communication goes bidirectional. In a non formal interaction, the use of digital media can save the time and their energy as well.

The present research also show the finding that the EFL students use digital media for working. Living in this fast moving world push them to keep in touch with the trend. For example, the producers of technology like handphone or laptop spill out their product almost every month or two. Youngsters like the students are the best target for this product due to their limited capacity for reasoning. It means that they will buy handphone or laptop to meet their hunger of prestige rather than the function of the gadget. Moreover, the increase of technology provide opportunity to use digital media for doing online business. This kind of business can be done any time without requiring particular place. Many students work to get more pocket money by online business like become agent of beauty product, become drop shipper, or selling their own product. Dolot (2018) in her research found that 69% of the students work and study at thesame. This fact is similar to the finding of the present research that shows 25.3% of the students use digital media for working.

As digital native, the frequency of the students in accessing digital media is high. The survey in this research results that 86,2% access the digital media everyday with the duration more than an hour every time they use the media. Some of them (4.6%) access the media

twice a week. Small number of students are less frequent in accessing the digital media. In the online learning era, the number of frequency and duration of internet and its application increases. It is not surprising if the EFL students show high frequency in accessing the digital media. However, in the new era of learning or we call it as new normal, the number of frequency and duration in accessing digital media is still high. The detailed result of the survey can be seen in the following table.

Table 3. The frequency in accessing digital media

Frequency	Percentage
Once a week	4.6
Twice a week	4.6
Three times a week	1.1
Every day	86.2
Any time needs internet	3.5

In the higher education, online learning is still applied despite the fact that Covid-19 Pandemic is almost over. Many universities still implement online learning or at least hybrid for some reasons. Some lecturers choose to apply hybrid learning where there is 50% online and 50% face to face because it is more effective than full online learning. EFL students also feel more comfortable to have hybrid learning because they can access learning from anywhere. The students, thus, do home literacy practices for longer duration and frequency. In this context, the EFL student develop their multi modal literacy and digital media literacy since the activities in learning (literacy development) are done through digital media. Language and literacy practices are inherently multimodal, because communication requires attending to diverse kinds of meanings, whether of spoken or written words, visual images, gestures, posture, movement, sound, or silence (Mills & Unsworth, 2017). The affordance of technology driven media and

text production has increased the circulation on multi modal texts in digitally mediated environment.

# The Modalities Employed by the Students in their Literacy Practices

In the digital era, access toward modes for learning are open widely resulting on multi modal learning. The students has a range of choice in using any modalities for digital mediated learning. Hence, learning becomes more enjoyable. The following is the discussion of the findings of the research about the modalities employed by the students in their literacy practices.

In this research, learning mode is classified into two, namely hardware and software. This classification is made to ease the researcher in interpreting the findings since the answers from the students are diverse. The questions about types of digital media is meant to know which kinds of learning mode they prefer to use. The following table reveals the modes used by the students in their literacy practices.

Table 4. Learning modes used by the students

Software
Mobile apps, Youtube, Websites, E-books, Google Classroom, Zoom, Gmeet, Video Virtual reality, Ruang guru, Netflix, Duolingo, Tiktok, Instagram,
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Wattpad, Zenius, Quipper

Hardwares that belongs to learning mode in this research are handphone, laptop, and MP4 audio player. These three things are among the most common media for learning. During the outbreak of Covid -19 there was enormous increase of handphone sales. A research by International Data Corporation (IDC) shows that in 2021 the sales of handphone in Indonesia reach the number of 40,9 millions. The increase of the number of hand phone sales is because the practicality of using hand phone for online compared to using laptop. Elementary school students are more familiar with using hand phone for sending and receiving assignments. In addition, hand phone is more affordable for parents because many of the parents lose their jobs due to the outbreak. The Covid -19 is disastrous not only in the field of health as proven the large number of death but also hit the economy of the people.

The next hardware used by the students in accessing the digital media is laptop. Almost all university students have laptop to support learning. Before the pandemic, they already familiar with laptop and internet because their assignment are more complex and require the familiarity to internet. When the small online business starts to become popular as highlighted by the popularity of market place, some students also take part not only as the buyers of the products but also actively become the seller or the producers. The ease of becoming the seller in the market places like Tokopedia, Shopee, Lazada, and others encourage the students to open their shops online. Another advantage of doing online business is students can do the business during school time by using laptop. At the same time, the students develop their digital media literacy. The students use social media for business and also for developing their foreign language learning too. A study by Chen, Kuo, & Hsieh (2019) show that social media has created a new literacy practice. The result of their research reveal new literacy indicators, namely, fun, performance, appropriation, play, and collective intelligent. The finding of the present study confirm such result. With the help of hardware, they develop new literacies not only reading and writing but also digital media literacy.

Another modality employed by the students in developing their literacy in the era of online learning is software. Some digital platforms are user friendly are very popular so many EFL students are familiar and can use it optimally. In the field of education, many platforms offered some excellences for the students support their literacy development. Quipper, for example, promotes students' literacy by providing learning contents easy to accessed by the students. Even it is like a school which provide learning programs as well as evaluation program. Platform like Facebook can foster students' literacy especially media literacy and improve students' collective intelligence. Chen, Kuo, & Hsieh (2019) define collective intelligence as to pool knowledge with others regarding collective issue such as issues related daily life in the dormitory, issues related to residential college, or campus issues or civic engagement.

The findings of the present research reveal the students' opinion in using digital mode for their learning. The outbreak of Covid-19 forces the students to be more familiar with various learning mode. Online is compulsory to keep the education still carried out. Even when the rate of infection has decreased, online learning still become favorite. To maintain their digital literacy, the EFL students keep using digital media for learning. The findings reveal that 66.7% of the students state that using digital mode for learning is more effective and efficient. One of the excellence of using digital mode is that it can be watched again when they need. Occasionally, during offline learning people only absorb little information when it is spoken. The information will stay in short memory and gradually disappear when it is not recalled. The following is the detailed information about students' opinión about

the use of digital media for learning.

Table 5. The students' opinion about the use of digital media for learning

The use of digital media	Percentage
More effective and efficient	66.7%
Save time	20%
Can be rewatched	5,1%
Need money to buy data package	5,1%
Less efficient	2,1%
Increase the absorption of material	1%

Digital media can help recall the information accurately and quickly. To be digitally literate the EFL students need a lot of practices. They need to have survival skill in accessing the digital media so that they do not waste time any time they have to work with laptop and internet. The findings of the current research confirm Buckingham's (2007) research that the growing accessibility of this technology means that quite young children can easily produce multimedia texts, and even interactive hypermedia – and increasing numbers of children have access to such technology in their homes. Further, Buckingham explains that media literacy involves 'writing' the media as well as 'reading' them; and here again, digital technology presents some important new challenges and possibilities. The increasing accessibility of technology means that even young students can produce multimedia texts, and even interactive hypermedia and increasing numbers of children have access to such technology in their homes. In such case, learning by using digital media can spark their literacy from very beginning.

Despite the excellence of online digital media which are considered effective and efficient, some students comment that they do not access digital for such a long duration. There is a type of person who can not watch the screen any longer because they feel dizzy or

their eyes cannot tolerate the radiation from screen. They have a health issue any time they contact to digital media for such a learning time. This factor causes the students to limit themselves toward long access of digital media.

There are several types of online learning. Most of the students are familiar with more than one types. The detailed information on the students' preferences are presented in the following table.

Type of online mode	Percentage
Synchronous	16%
Asynchronous	14.9%
Hybrid	67.8%
I don't know	1.3%

Table 6. Type of online mode preferred by the students.

The favorite type of online learning is hybrid. Hybrid learning that combines face-to-face learning and online learning is the most preferable mode because of its flexibility. 67.8% of the students choose hybrid as the suitable learning mode for them. The composition of hybrid learning is 50% online and 50% offline. This composition provide space for the students to seek more information online if they cannot find it offline. When it is done online, the students (16%) prefer synchronous than asynchronous mode (14.9%). However, some students answer they do not know which mode is the best for them (1.3%). There is also a student who states that the learning mode is selected depending on the situation.

The practice of learning types is commonly done through three types, namely, synchronous, asynchronous, and hybrid. The favorite type of online learning is hybrid learning. This type combines face to face learning and online sessions and becomes the most preferable one because of this flexibility. The composition of hybrid learning is 50% online and 50% offline. This composition creates a space for the students to think or seek more information online when there is problem on their learning. In some cases, most interactions between students and the teacher, as well as the direct delivery of instruction, take place in person in the classroom, while materials and possibly some additional activities are delivered online. In other cases, most of the class activities occur online, with infrequent meetings in person to solve problems and support community building. In some blended arrangements, students may choose which activities to complete online and which to complete in a classroom. The finding of this research show a fact that the students do not know which mode they prefer. An ideal hybrid classroom should provide the students with a personalization because not all students is suitable with one size fit all teaching model.

The present result of the research reveals that the students prefer synchronous learning. Synchronous virtual classrooms operate like traditional classroom with set study schedules and live discussion. They allow students to engage with the learning materials with their classmates as long as they can connect to internet. In the era of online learning as the effect of Covid 19 pandemic, many classes are held synchronously with the of WhatsApp group chat, Zoom, and Google Meet. This delivery type give the students a structured and immersive learning comfortably done at home without hurry and worry (Jensen, George, Russell, & Odgers, 2019). For the students who chose synchronous mode they feel happy to meet the teacher and their peers virtually because they can make interaction directly. If they need any clarification about concept or knowledge they can do it right away. Stewart, Harlow, & DeBacco (2011) contend that productive learning occurs through conversation among students and faculty who create knowledge together, in real time, without being physically together in the same place. Moreover, student-teacher interaction currently has the highest-perceived value among many higher education students. Student-student interaction is critical for learning environments based on constructivist principles and for building collaboration skills (Anderson, 2003). He further argues that audio and video conferencing may inhibit interaction to an extent due to the natural distance imposed by the technology.

Some students answer that they prefer to have asynchronous class. The definition asynchronous learning is any types of learnings or educations that do not occur at the same time and the same place. The teacher and the students do not meet in a real time communication. Asynchronous learning activities include email exchanges with teachers, online discussion boards, learning management system, and others. Asynchronous learning provide opportunity for the realization of highly desirable pedagogical practices that are difficult to do in a conventional room. Like synchronous learning, asynchronous model provide some benefits such as flexibility, participation quality and quantity, communication openness/access, and post participation review/access for reference purposes.

# The Contribution of Digital Media in Shaping Students' Literacy

Literacy in the past is only related to written text but now has extended the meaning to the competency or skill including thinking ability, self control, and collaboration. Literacy is at the heart of developmental continuum. Literacy is instrumental in cultivating, coordinating and defining activities, experiences and relationships. It is occurring in technology mediated environments where information, communication and expression are highly mediated, ephemeral, multimedia, interactive, collaborative, international, and where boundaries between creators and audiences or writers and readers have fundamentally disappeared. The following is discussion on how literacy is shaped by the means of digital media.

From digital media the students benefit the development of their

thinking capability. The sudden change from face to face to online learning modes by no means push the students to develop their high order thinking skills. The following table reveals how the students view thier development of thinking skills.

Table 7. The contribution of digital media to students' thinking capability

Contribution	Percentage
Develop thinking capability	69.3%
Provide alternative for solving problema	10.1%
Improve understanding from the source	5.2%
Get a lot of education	5.2%
Improve access to knowledge	5.2%
Add more knowledge	5.1%

The present study intends to find out if digital media can improve thinking ability. The students mostly answer that the activity in using digital challenge the thinking ability. Accessing digital media requires the skills to survive in the virtual world. Among the answers from the students, it is known that through digital media they increase their creativity. This possibly happen because many creative ideas are provided through the digital media. In such case, the digital media is not limited to laptop and internet. Video and MP4 audio player are of the category of digital media. As EFL students, they get lots of practices in making educational video as the outcome of typical subject matters. They have to think how to accomplish the task with the best quality video and thus, accessing digital media help them to get ideas on finishing the task. Chan (2010) states that students in digital classrooms use mobile devices that are wirelessly interconnected for completing learning tasks, especially accessing additional learning information from sources other than textbooks. In the context of

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the present research, the existence of the mobile devices is helpful in accomplishing the learning tasks. This fact is in accordance with Kong's (2014) research that learning tasks in digital classrooms often require students to properly process information from different sources and then critically assimilate information for knowledge construction. Digital classrooms, therefore, also provide students with many opportunities to develop and then apply IL competency and critical thinking skills in day-to-day learning of domain knowledge.

The finding of the research reveals that the contribution of using digital media also shapes the students' literacy in the sense that it help to control emotion. Some investigations show negative connotation of technology use toward students' psychological wellbeing (Twenge, Martin, & Campbell, 2018, Sieberer, et al., 2021) but the present study finds different fact that the students can control emotion when they use digital media. It supports (Jensen, George, & Odgers' (2019) statement that the use of technology does not forecast mental health. The students can control their feeling and mostly happy because they get more education and entertainment in using digital media.

The students' social life is affected by the frequent access of digital media. Language and literacy practices take place in multi modality communication requires attention to many kinds of meanings, whether of spoken or written words, visual images, gestures, posture, movement, sound, or silence. The role of digital media in the social communication is to mediate the negotiation of meanings among people in the distant. 67% of the student affect their social life because they interact with others by the devices on their palm. Communication which is formerly done directly face- to- face is replaced by video call or chat via WhatsApp or other social media. This finding confirm Mills & Unsworth's (2017) report that the study of multimodal literacy learning in schools and society is an emergent field of research, which begins with the important recognition that reading and writing

are rarely practiced as discrete skills, but are intimately connected to the use of multimodal texts, often in digital contexts of use. The implications of multimodal literacy for pedagogy, curriculum, and assessment in education is an expanding field of multimodal research. In addition, there is a growing attention to multimodal literacy practices that are practiced in informal social contexts, from early childhood to adolescence and adulthood, such as in homes, recreational sites, communities, and workplaces.

The present research seek the information how EFL students integrate the use of digital media in their learning process. The findings show that 93% of the students use the digital media to access learning materials. In the higher education where the students are required to be independent, they access the materials online using mobile devices or laptop. They also use digital media when they complete the learning tasks. When the task is accomplished, again, they submit their work online. The integration of digital media use in learning is done in the writing and reading process. To be truly literate online, a term that Gurak (2001) called as cyberliteracy, the students must understand the economic and political forces that are shaping information technologies. Further she notes technological literacy is typically confined to learning how to use a computer and a keyboard, or how to do online searches. However, the fact is that the EFL do more than just online search. They do online writing and even collaborative writing by using platform like Google Doc or Wattpad. They also listen to music or create various digital products such as picture, novel.

The EFL students' literacy practice results on various products. The most popular products is pictures. Picture can say more than thousand words, meaning that picture can represent the message behind it. To create some pictures the students may select various applications. A lot of drawing community also exist in the internet. Through the community the students can learn or take online course on drawing.

Beside picture, the EFL students also produce short stories. Using Wattpad, they can create writing online. The writers may get input from the reader to make the writing better. EFL students who have more serious intention in writing produce novels published online. Other outcomes of their digital literacy practices are articles, advertisement, animation, graphic design, and others. Their connection to internet can be said as useful to support literacy especially digital media literacy.

# **CONCLUSION**

As digital natives or Gen Z, the students conduct various activities by using digital media, either connected to internet or not connected to internet such the use of MP 2 audio player, or drawing digital picture by using laptop. The students show their familiarity with various applications from the simple ones like social media until the sophisticated ones like using augmented reality or virtual reality. The EFL students who are categorized as I-Gen (Internet generation) has high frequency and duration in accessing digital media and thus foster their digital literacy. The EFL students access digital media for some purposes such as online learning, online working, online businesses, and enjoyment. Their favorite mode for learning includes hybrid, synchronous, and asynchronous. As the EFL students are digitally literate, the outcome are various digital products such online picture short stories, novels, animation, advertisements, and some margins from doing online business. The conclusion of the present research is the more opportunities given for the EFL students to access digital media, the more literate they are. The more literate they students, the more creative and productive they are. The teachers can see the development of literacy progress because there is digital tracking which eases the teacher to accompany students' learning.

#### REFERENCES

- Aghaei, K., Lie, K., Noor, N., & Rajabi, M. (2014). From Theory to Practice: Theater Reading (TR) as a Critical and Transformative Literacy Practice in an Educational Development Course. Procedia- Social and Behavioral Sciences, 37-41.
- Anderson, N. (2003). Scrolling, Clicking, and Reading English: Online Reading Strategies in a Second/Foreign Language. The Reading Matrix, 1-33.
- Buckingham, D. (2007). Digital Media Literacies: Rethinking Media Education in the Era of Internet. Research in Comparative and International Education, 43-55.
- Chan, J. Y. (2021). Bridging the Gap between ELF and L2 Learners' Use of Communication Strategies:Rethinking Current L2 Assessments and Teaching Practices. System, 1-14.
- Chen, S., Kuo, H., & Hsieh, T. (2019). New Literacy Practice in a Facebook Group: The Case of a Residential Learning Community. Computers and Education, 119-131.
- Dolot, A. (2018). The Characteristics of Geenration Z. E-mentor, 44-50.
- Felten, P. (2008). Visual Literacy. Change, 60-64.
- Gurak, L. (2001). Cyberliteracy: Navigating the Internet with Awareness. New Haven CT: Yale University Press.
- Hobbs, R. (2017). Create to Learn: Introduction to Digital Literacy. New Jersey: Wiley & Sons.
- Jensen, M., George, M. J., Russell, M. R., & Odgers, C. L. (2019). Young Adolescents' Digital Technology Use and Mental Health Symptoms: Little Evidence of Longitudinal or Daily Linkages. Clinical Psychological Science, 1416–1433.
- Jones, R. H., & Hafner, C. A. (2012). Understanding Digital Literacy: A Practical Introduction. New York: Routledge.
- Kaur, S., & Kaur Sidhu, G. (2014). Evaluating the Critical Literacy Practices of Tertiary Students. Procedia- Social and Behavioral Sciences, 44-52.
- Leung, B. T., Xie, J., Geng, L., & Pun, P. N. (2019). Transferring Information

- Literacy Practices. Macau China: Shanghai Jiao Tong University Press.
- Mills, K., & Unsworth, L. (2017). Multimodal Literacy. In n.n, Oxford Research Encyclopedia of Education (pp. 1-25). Oxford: Oxford University Press.
- Puranik, C. S., Phillips, B. M., Lonigan, C. J., & Gibson, E. (2018). Home Literacy Practices and Preschool Children's Emergent Writing Skills: An Initial Investigation. Early Childhood Research Quarterly, 228–238.
- Rheingold, H. (2010). Attention and Other 21st Century Social Media Literacy. EDUCAUSE, 14-24.
- Roberts, J., Jergens, J., & Burchinal, M. (2005). The Role of Home Literacy Practices in Pre School Children's Language and Emergent Literacy Skills. Journal of Speech Language and Hearing Research, 345-359.
- Stewart, A., Harlow, D., & DeBacco, K. (2011). Students' Experience of Synchronous Learning in Distributed Environments. Distance Education, 357-381.
- Suwana, F., Pramiyanti, A., Mayangsari, I., Nuraeni, R., & Firdaus, Y. (2020). Digital Media Use by Generation Z during Covid 19 Pandemic. Jurnal Sosioteknologi, 327-340.
- Syverson, P. (2008). An Ecological View of Literacy Learning. Literacy, 42(2), 109-117.
- Twenge, J. M., Martin, G. N., & Campbell, W. K. (2018). Decreases in psychological Well-Being among American Adolescents after 2012 and Links to Screen Time during the Rise of Smartphone Technology. Emotion, 765-780.
- Unlusoy, A., De Haan, M., Leseman, P. M., & Kruistum, C. V. (2010). Gender Differences in Adolescents' Out-of-School Literacy Practices: A multifaceted Approach. Computers and Education, 742-751.
- Wu, Z. (2020). Tracing EFL Writers' Digital Literacy Practices in Asynchronous Communication: A multiple-Case Study. Journal of Second Language Writing, 1-15.
- Yunos, S., & Din, R. (2019). The Generation Z Readiness for Industrial Revolution 4.0. Creative Education, 2993-3002.