# DIGITAL LITERACY AMONG YOUNG LEARNERS: HOW DO EFL TEACHERS AND LEARNERS VIEW ITS BENEFITS AND BARRIERS?

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#### **Abstract**

The present study aims to explore perceptions of young learners and EFL teachers towards benefits and barriers of digital literacy. Eight young learners and five EFL teachers took part in this qualitative study. In-depth semi-structured interviews were employed to collect qualitative data. The results depict that there are benefits and barriers of digital literacy for young learners in learning English. The benefits of digital literacy include improving young learners' writing, reading, listening, and speaking skills, getting used to authentic materials, increasing frequency of digital technology use, enhancing online collaboration between teacher-learners and learners-learners. However, this study reports that digital literacy also has some negative impact for young learners. Problems with weak signals which affect difficult internet access still remain a problem. Contents of online digital materials are not easy for young learners to interpret and convert into simple, self-regulated information. Moreover, digital literacy tools are considered to be expensive. These barriers might be influenced by other problems such as complexity of digital literacy tools, different comprehension levels among young learners, young learners and EFL teachers' lack of digital literacy experiences. In conclusion, the results give valuable insights in how to go about integration of digital literacy tools for young learners.

Keywords: digital literacy; young learners; benefits; barriers; EFL teachers

#### 1. Introduction

The use of digital technology for learning language among young learners has become an important issue among EFL teachers, learners, and stakeholders. For the EFL teachers, digital technology is beneficial in that they can enhance their teaching quality by helping their young learners to learn the language (EDC, 2018). Interestingly, young learners, upon amazing innovation of digital technology, have indulged in utilizing various digital literacy tools such as the internet, mobile phones, online and offline games, texting, and drawing tools (Downes, 2002; Carrington, 2005; Marsh, 2006). Such a wide range of digital technologies is useful for the young learners to improve their understanding towards every word, text, and meaning as

delivered via the digital literacy tools. It implies that young learners develop their digital literacy through such digital literacy tools, which also promote self-regulated learner autonomy (Turula, 2017) when young learners enforce themselves to learn English. In line with that, the "digital literacy allows for accessing, analyzing, evaluating, creating and participating with multimedia messages" (Jolls, 2008, p. 2). Moreover, young learners with high digital literacy learn English by transforming, informing, and reforming messages or texts from digital literacy tools (Davidson, 2009).

Young learners who believe in the ability of digital literacy tools that help them understand texts or messages experience multimodal literacies. This kind of literacy is combined from several digital literacies which allow the learners to access listening, writing, reading, viewing, speaking processes simultaneously (Kress & Jewitt, 2003; Pahl & Rowsell, 2005; Walsh, 2008). There has to be a good strategy for young learners to understand digital texts as they contain information graphics which give various views of information compared to that of printed texts (Carrington, 2001). In this case, the multiliteracies are determined by evaluating young learners' digital literacies. In other words, digital literacy helps to improve young learners' multiliteracies through careful, detailed understanding.

A plethora of studies on digital literacy in teaching and learning English has been done, including digital video and audio technology (Miller, 2007; Skouge, Rao, & Boisvert, 2007), music (Paquette & Rieg, 2008), computer application for learning (Parette et al, 2008; Meurant, 2010; Li, 2014), phonemic awareness instruction (Johnson & Tweedie, 2010), language and literacy among dual language learners (Castro et al, 2011), digital games and texts in English and literacy classroom (Davidson, 2009; Apperley & Beavis, 2011), teenagers' news literacy (Kleemans & Eggink, 2016), digital storytelling to support digital literacy (Churchill, 2016), framework for emergent digital literacy (Newmann, Finger, & Newmann, 2017). Moreover, a number of studies on how digital literacy is viewed has also been conducted such as perceptions of EFL students' computer literacy (Bataineh & Baniabdelrahman, 2006), beliefs and practices of preschool teachers (Brown et al., 2012), teachers' perceptions of literacy and use of technology in their classroom (Lawrence, 2013), perceptions of digital and printed texts to predict literacy (Seok & DaCosta, 2016), perceptions of the level of digital literacy (Çam & Kiyici, 2017) in L2 classroom (Sen, 2017).

The above studies mostly focus on perceptions or views on the implementation of digital literacy via computers or other digital literacy tools. In Indonesia, there are several studies which are related to digital literacy. Supratman and Wahyudin (2017) studied the growth of internet access as a part of digital literacy among Indonesian youth and adults. In the same

vein, Rahmah (2015) states that the ease of internet growth has a negative impact towards digital literacy skills. Meanwhile, another study by Eryansyah et al. (2019) found that not all Indonesian EFL learners are able to develop their digital literacy. It is because they are not provided by sufficient skills and availability of infrastructure such as computers.

Kurniawati, Maolida, and Anjaniputra (2018) conducted a study to evaluate the effectiveness of technology as digital media literacy. The study shows that digital media literacy is better implemented by a teacher with appropriate character. Moreover, a study by Pratolo and Solikhati (2020) depicts that digital literacy in Indonesia can be better developed through the use of both smartphones and computers and proper quality of teachers.

Perdana et al. (2019) did research into digital literacy of Indonesian learners at different levels. The results depict that each learner from a different level has various styles of digital literacy. A different study by Zuroh and Liansari (2017) shows that Indonesian learners have low amount of digital and language literacies. This happens when the learners do not have a habit to read and write more than they used to do.

However, few research has been done in terms of both EFL teachers and learners' views towards the benefits and barriers of digital literacy among young learners in Indonesian educational contexts.

Therefore, the present study is intended to explore Indonesian EFL teachers' and learners' views towards the problems and barriers of digital literacy among young learners. This study is different from the previous studies in a number of respects. First, it attempts to unleash underlying reasons why digital literacy among young learners is considered to be beneficial. Second, it concerns underlying problems that affect young learners when trying to improve their digital literacy. Third, this study is conducted in the Indonesian educational context. Indonesia is one of the developing countries which begins to adopt advanced digital technology in learning. Problems might be more critical as not all young learners are able to operate and afford digital literacy tools. Many schools are located in rural areas and the use of technology for learning still remains a problem (Mudra, 2018). Fourth, the EFL teachers and learners are selected purposely in several random schools consisting of both rural and city schools.

Above all, the present study is undertaken based on the following research question: What are the benefits and barriers of digital literacy as perceived by EFL teachers and learners? To clearly define the topic of this paper, the following theoretical framework is provided to describe each key term. This theoretical framework is organized based on the main topics,

namely definition of digital literacy, digital literacy in English language teaching and learning, and components of digital literacy for English learning.

#### 2. Literature review

## 2.1. Digital literacy

Digital literacy is defined as "the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (Gilster, 1997, p.215). Basically, "digital literacy represents a person's ability to perform tasks effectively in a digital environment, with 'digital' meaning information represented in numeric form and primarily for use by a computer" (Jones-Kavalier & Flannigan, 2006, p. 9). The use of one of digital literacy tools in learning English is compulsory to determine "the ability to use technology as a tool to research, organize, evaluate, and communicate information, and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information" (Lankshear & Knobel, 2006a, p. 23). Digital literacy promotes digital technology to process various pieces of information in online contexts such as Web 2.0 and its online applications.

Digital literacy in English teaching and learning contexts needs to be acquired by young learners. That is why digital literacy can be defined as "survival skill in the digital era" (Eshet-Alkalai, 2004, p. 102). To ensure that young learners are digitally literate, supporting skills such as information, media, technology skills; learning and innovation skills; and life and career skills have to be developed (Warshauer & Matuchniak, 2010). These literacy skills direct young learners to be digitally competent. Digital competencies are important to figure out whether young learners are ready for utilizing digital tools for their English learning. Digital competencies help young learners to proceed with digital literacy tools as a requirement for becoming digitally literate. This is in line with the following definition of digital competencies (Ferrari, 2012):

knowledge, skills, attitudes (thus including abilities, strategies, values, and awareness) that are required to use ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, socializing, consuming, and empowerment. (p. 43)

The above concept of digital competencies is very comprehensive. It reflects proper knowledge for young learners to be successful in digital literacy. Gilster (1997), however,

formulates simple categories for digital competencies which include managing information, examining the main concept of knowledge, surfing information on the web, and determining messages or texts.

#### 2.2. Components of digital literacy

In general, digital literacy consists of several components which include assembling digital literacy tools, transforming print-based literacy, balancing use of "cut-and-paste" and "copy/delete" procedures, and promoting the "inclusion of visual" (Mifsud, 2006, p. 136-9). The components are related to the type of information needed for understanding digital literacy in English learning for young learners. The information varies depending on its relevant functions for improving digital literacy skills. Churchill (2016) states:

"Digital literacy" is defined as a set of skills that enable an individual to use technologies to work with information. Information in the context of this study is examined as digital information, which encompasses texts (e.g., articles published on websites), images (e.g., photographs and pictured on web sites or taken by students), videos (e.g., multimedia products, animations and broadcasts), and podcasts (e.g., recorded narrations published online or on students' desktops). (p. 21)

Digital literacy requires young learners to work with messages, illustrations, videos, and recorded audios such as podcasts. To do this, young learners need to perform specific digital literacy skills. Eshet-Alkalai & Amichai-Hamburger (2004) divide such skills into five categories, namely i) photo-visual skills ("reading' instructions from graphical displays'); ii) reproduction skills ('utilizing digital reproduction to create new, meaningful materials from preexisting ones'); iii) branching skills ('constructing knowledge from non-linear, hypertextual navigation'); iv) information skills ('evaluating the quality and validity of information'); v) socio-emotional skills ('understanding the 'rules' that prevail in cyberspace and applying this understanding in online cyberspace communication') (p. 421). These specific literacy skills can be implemented and organized via web 2.0 digital-related tools (Hargittai, 2008) including a) interactive white board (e.g., ACTIVBoard, SMART Board), b) webquests (e.g., Questgarden, Zunal, WebQuest, Fur.ly), c) digital storytelling (e.g., iMovie, Windows Movie Maker, Posterous, Dreamweaver), d) digital video sharing tools (e.g., TeacherTube, Videoegg, Selfcast), e) web-based word processor/spreadsheet/presentation/form/book/data storage services (e.g., Buzzword, Book Goo, BookRix, Etherpad, Peepel, OpenGoo, ZOHO, Google Docs, Google Apps), f) web-based photo sharing/uploading/managing (e.g., Flickr, Shutterfly, PhotoPeach Dropshots), g) digital mapping (e.g., Google Maps, Community Walk, ZeeMaps,

Wayfaring, MapBuzz), h) audience response systems/audience clickers (e.g., iRespond, Qwizdom, TurningPoint), i) social networking (e.g., Facebook, MySpace, LinkedIn), and j) online learning systems (e.g., Blackboard/Moodle/Vista/WebCT). Such digital tools are much helpful for young learners to introduce themselves with the latest advancing technology for learning English.

# 3. The present study

#### 3.1. Participants and methodology

This research was undertaken by implementing a case study with eight young learners and five EFL teachers. The learners were purposely selected from different schools in one province in Indonesia. Four learners were from different rural schools, while the others were from urban schools. They varied from first, second, and third grade of middle high schools.

To involve the learners in the current study, the researcher followed several steps. First, the researcher observed learners from rural schools which have lower and better access to learning technology such and the internet. Second, the researcher observed learners from urban schools which have better access to learning technology such as the internet. The purpose was to ensure that the learners have low or high competency in digital literacy components such as the use of computer and the internet.

The teachers were selected from different rural and urban schools in the same province. To involve the EFL teachers, the researcher also observed EFL teachers from rural and urban schools which have better or worse access to teaching technology. The teachers were purposely selected from different middle high schools. The selection of teachers was based on their different experiences in using computers or the internet. In the pre-research phase, the researcher found that the learners have various views towards teaching and learning technology. This has become the reason for determining levels of digital literacy.

## 3.2. Data collection and analysis

The method employed in this study was in-depth semi-structured interview. The interview was intended to explore young learners' views towards advantages and disadvantages of digital literacy for their English learning. It also aimed to describe EFL teachers' views towards their learners' digital literacy.

The data of this study were collected through several steps. Firstly, the participants' readiness including teaching and learning experiences, skills in using digital tools, and ages

were identified. Secondly, the learner participants were asked to answer several questions about their views on benefits and barriers of digital literacy for their English learning. Thirdly, the EFL teachers were asked to describe their perceptions towards their young learners' digital literacy. Both responses for benefits and barriers of digital literacy were delivered respectively.

The data were analyzed through several steps which include coding and reducing data, displaying data, verifying data, giving conclusions (Miles, Huberman, & Saldana, 2002). Raw data taken from the interviews were given a code. This code enabled the researchers to easily figure out which data they worked with. The data were, then, checked, read, and reduced. Raw data might be reduced if they met data saturation. The next step was to display data in terms of qualitative descriptions. The data were, then, verified through data triangulation to ensure its trustworthiness. Finally, the conclusion was determined to allow readers and further researchers to figure the gist of the article.

## 3.3. Results and findings

Having employed in-depth semi-structured interviews with the young learners and the EFL teachers, the results are subdivided into two main subparts, namely benefits of digital literacy based on young learners' and EFL teachers' views as well as barriers of digital literacy based on young learners and EFL teachers' views. In this section, learners and teachers are anonymous; their surnames are permitted to be published. Therefore, learners are coded by L1, L2, L3, L4, L5, L6, L7, and L8. For EFL teachers, the codes are T1, T2, T3, T4, and T5.

## 3.3.1. Benefits of digital literacy: young learners' views

This subpart consists of benefits of digital literacy based on young learners' views. It includes learner English skill improvement: writing, reading, listening and writing.

# 1. Learner English skill improvement: writing

The use of digital technology in learning English helps young learners to improve their digital writing literacy. As reported by the learners, social networks (e.g Facebook, WhatsApp) and blogs were the internet applications that motivated them to write. Findings also reported that these young learners were enthusiastic to write in English. They even did not pay attention to whether their English writing met grammatical rules. For learner 3 and learner 5, social networks helped to accommodate writing hobby.

Everyday I spend time writing wise words in English and put them on my social network applications. I do not care about any incoming comment. I just love writing and writing. (L3)

I like writing some status updates in my Facebook Wall. It makes me feel satisfied with my status update writing. (L5)

Unlike other learners, learner 2 kept giving a comment to every status update as it emerged on *Facebook* Wall.

I always read a status update before I respond to it. I always think about what to say. Finally, I give a comment. Finally, I am used to writing comments. (L2)

Learner 4 argued that applications such as *WhatsApp* allowed her to look up meaning for new vocabulary items in a dictionary. It was considered to be a positive activity to improve digital writing literacy.

Some of my classmates always send a message in English via WA. I do not know English well. That is why, I have to look up the unknown words in an online dictionary. I can still remember the vocabulary I looked up. (L4)

Blogs were reported to encourage young learners to write in English. The learners were asked to answer questions, write a poem, or give their opinion on a blog wall designed by the teachers. Comment boxes of the blog were provided for the young learners to write in English.

We have to write a comment in the comment box. Our English teacher has a blog. She gives us some exercises and we have to write the answers on the comment box. (L1) My English teacher really likes poems. We also learn poems from his blog. For our task, we make a poem and write it on his blog wall. (L6)

#### 2. Learner English skill improvement: reading

Reading is an important skill as regards digital literacy. In this study, the young learners reported that they encountered more valuable information and knowledge through reading. Moreover, online reading stimulated their enthusiasm and motivation as they were able to work with creative and interactive visual materials on the internet. Preferred reading materials included materials with various images and illustrations, animated reading materials, colorful texts, reading texts with hyperlinks. Learner 4, for example, tended to obtain information from animated reading materials. It is believed that such reading materials kept the learner away from boredom during reading.

If I am asked about online reading, I am ready to answer that I just want to read texts full of animation. I cannot get anything without such animation features. (L4)

For learner 7, hyperlinks while reading texts were much helpful to figure out the detailed meaning of any unknown words.

When I read a text online, I refer to some hyperlinks offered. It helps me a lot to understand difficult words. So, I do not need a dictionary anymore. (L7)

Learner 1 and learner 3 argued that colorful texts and images made them feel relaxed when reading online.

I never feel bored reading online. I even get more and more by combining texts and illustrations of the texts. (L1)

Colorful reading texts refresh my eyes, my mind, and my thoughts. The more colorful the text is, the easier for me to comprehend the text. (L3)

## 3. Learner English skill improvement: listening

listen to it later in my room. (L8)

Listening skill was developed when the young learners utilized both offline and online computer, android, and internet applications. In this study, it was found that English music and podcasts applications focusing on teenager's daily topics were more popular among the young learners.

Learner 5, learner 8, and learner 2 listened to podcasts both outside the classroom and at home. The topics were mostly related to teenager's daily activities such as being at school, going around with friends, and spending time for fulfilling hobbies.

I love listening to hobbies among young people. I can choose any recording I like. Listening to the recordings has developed my English skill. So, I like listening again and again. (L5) As a student, I have many chances to learn the way young students behave positively in their schools. I listen to podcasts about schooling on the internet. Sometimes I download it and

I am pretty sure that when I listen to teenagers' daily life in other countries such as England or America, I feel happy. They talk about their English learning. I can learn from it. I know English is their first language. They have to speak well, too. (L2)

For learner 6 and learner 7, English music offered not only organized sounds, but also words, sentences, and implied meaning. The combination between sounds, rhymes, and words allowed the learners to enjoy listening to English songs while concerning learning vocabularies and implied messages of the songs.

I never forget listening to English songs everyday. I have to listen to it, because the words are easy to understand and have deeper meaning. (L6)

Listening to music is my hobby. I like rock music. It is so meaningful. There is so much information I can get. It is all about life. It is all about our life. (L7)

## 4. Learner English skill improvement: speaking

Digital literacy not only enabled the young learners to be skillful at writing, reading, and listening, but also at oral communication. It is reported that speaking followed listening. Once the learner listened to a song, recorded podcast, news, or video, they tended to retell the main topic of the digital resources. This also helped them comprehend every message, text, or information they encountered via digital tools. Learner 1 admitted that watching English videos encouraged him to talk by himself by using English in his room.

I am a bit shy to say that I am used to speaking English in front of the mirror in my room. I do it alone. I really enjoy it, because I express all my feelings. I use gestures like those in the video I watched. (L1)

Different from L1, learner 4 tended to make a simple daily conversation with her classmates.

We are asked by our English teacher to listen to several conversations. Then, we are asked to practice such conversation naturally with our classmates. We do it everywhere in the canteen, school yard, inside the classroom, and during resting time. (L4)

#### 5. Learner collaborative work

This study reported that digital literacy increased learner-learner collaboration in learning English either in the classroom or outside. Some of them worked in pairs; the others worked in groups of three or four. Learner 7 believed that collaboration with other learners helped to explore a question or problem from the teacher.

I think it is a good idea to work with a classmate. When I do not have any idea, my classmates as my group partner have one. If my partner does not know this, I might know that. Honestly, I still need some guidance to operate all processors such as word, power point, and of course excel. (L7)

Collaboration was not only face-to-face discussion like L7 and classmates, but online or distant collaboration was also well-known among young learners. Learner 2 considered that online collaboration can be conducted via social networking applications such as *WhatsApp* and *Facebook*.

When I have some problems, I ask my classmates via WhatsApp. I catch responses quickly. I can understand the meaning via WhatsApp. It is so easy to reach any classmate with WhatsApp. (L2)

# 3.3.2. Benefits of digital literacy: EFL teachers' views

This subpart explores EFL teachers' views towards the benefits and barriers of digital literacy for their young learners. The benefits are authentic materials for young learners, teacher-and-learner digital technology use, and teacher-learners collaborative work.

## 1. Authentic materials for young learners

Digital literacy was deemed to develop young learners' preference and ability to utilize authentic materials for their English learning. One of the EFL teachers, teacher 2, reported benefitting from authentic materials offered for the learners. Both the teacher and the learner used authentic materials for English course.

I always believe that authentic materials are advantageous for my learners. I have been teaching English to young learners for fifteen years and I have been using authentic materials as the main materials. I ask my learners to read the materials and the result is beyond my expectation. Some learners are able to surf and download other authentic materials from the internet. They not only read it, but also retell and rewrite the content on their own words. (T2)

For teacher 5, authentic materials were used for teaching reading and allowing the learners to learn native-like grammar, new vocabulary items, and English cultures.

The authentic material has no doubt for its usability and effectiveness. Look, it is, of course, appropriate for teaching reading skills. More importantly, the learners also learn grammar used by native speakers. Many new vocabularies used in various contexts are identified. Every content of the material is based on native culture which is natural and natural. (T5)

Teacher 1 was certain that his young learners can access authentic materials on the internet. Besides, interpreting the content of the materials was no more a problem for his learners.

First, I was sure that my learners were able to browse websites which contained authentic materials. They did. Then, I was sure they were able to download the materials. They did again. Eventually, I was sure they were able to interpret the content of the materials. They did like I expected. I think there is a balance between natural content of authentic materials and learners' interests in reading the materials. (T1)

Teacher 3 and teacher 4 found that interesting authentic materials were colorful and featured with funny, natural, and amazing illustrations.

It is not surprising why young learners can illustrate the content of authentic materials I offer for them. The materials are really helpful. They contain good colors and more interesting images. It is not surprising that the learners focus on the features. I am as the teacher interested in those gorgeous features as well. (T3)

My learners admitted that they liked many illustrations within the authentic materials. They told me that they read the text in the materials, but they referred to the illustrations to help them out. (T4)

## 2. Teacher-learners digital technology use

Digital technology was utilized for learning English both inside and outside the classroom. One of the teachers, teacher 2, reported benefitting from young learners' digital literacy. It not only encouraged the learners to use digital tools, but also introduced such tools to the teacher who was not able to operate it.

I am now able to operate some computer applications for teaching English. Truly speaking, my young learners, who are still young, teach me how to use android applications for teaching them. It sounds weird, but it is good for me. Now, I always use applications for teaching English. My learners are enthusiastic to use the applications. Most of them can easily understand what I teach. (T2)

#### 3. Teacher-learners collaborative work

Some popular social networking applications such as *Facebook* and *WhatsApp* were not only entertaining, but also useful for developing communication in English. Teacher 5, for example, created a group on *Facebook* for learning. Each learner was asked to submit their answers via the application. They were also allowed to give comments or to share experiences or problems with the English course.

Facebook application allows me to interact with my learners. The group I created is now really communicative. My learners are allowed to write a status update as a part of their problem or experience in learning English. I also provide tasks or projects or questions via the group. They look so happy to work with the group. I can feel that their knowledge is getting better and better via such interactive tools. (T5)

#### 3.3.3. Barriers for digital literacy: young learners' views

Barriers for digital literacy, as viewed by young learners, are access to the internet, expensive digital literacy tools, complexity of material contents.

#### 1. Access to the Internet

Internet access did not entirely support young learners' interests to surf materials and interpret contents. This obstacle was affected by lack of signal strengths, distant internet cafe location,

and lack of WiFi signal. Learner 1 and learner 4 experienced the same obstacles when preparing for accessing the internet while learning English.

We know that the internet is very useful to help us be knowledgeable with native-like English. Unfortunately, the signal is always weak in this area. How can we reach better knowledge? (L1)

Once I type a word in Google Search Engine, I need to wait for a couple minutes for it to successfully process the request. I become less motivated to learn English from the internet. (L4)

In the same vein, learner 8 felt regretful that WiFi signal was not really powerful to reach every part and corner of the school.

WiFi is available in this school, but its signal is so weak. I cannot even open any easy search on the internet. This signal bothers me to learn, really. (L8)

## 2. Expensive digital literacy tools

Digital literacy tools such as mobile phones, android gadgets, laptops, ipads, and digital cameras were believed to be much more expensive for the learners. Learner 2, learner 6, and learner 7 were critical about the expensive digital literacy tools for their English learning. They intended not to rely upon the use of such digital literacy tools for acquiring digital knowledge from the internet.

I know digital tools such as laptops and android gadgets are much more useful for increasing my English. Yet, the tools were not affordable for me and for my parents. (L2) It is much fun to learn English via smart phones. I just find it hard to get a fancy, better one. It is more expensive. I just use my old phone. It can still be used for learning. (L6) I am not going to learn English if I have to buy an advanced tool. Maybe the school provides the tool for me and for all learners to learn English in the school. (L7)

#### 3. Complexity of materials

The content of materials browsed and provided was complicated for young learners. Some learners (e.g learner 3, learner 4, and learner 8) found it difficult to read and interpret the materials.

My teacher usually gives us some materials browsed from the internet during English courses. I am not too good at comprehending the text and interpreting the meaning of their contents. (L3)

Not all materials we search are interesting and easy to read. Some materials only consist of unknown words and complex grammatical rules. (L4)

# 3.3.4. Barriers for digital literacy: EFL teachers' views

This subpart shows EFL teachers' views towards their young learners' barriers for digital literacy. The major barriers proved to be complexity of digital literacy tools, different comprehension levels, lack of policy support, and lack of digital literacy experience.

## 1. Complexity of digital literacy tools

Digital literacy tools such as mobile phones, android gadgets, and laptops were reported to be complicated literacy tools for teaching and learning English. For teacher 2, digital literacy tools consisting of complicated operation procedures were difficult to be acquired.

I am not skillful in operating digital literacy tools such as the internet and computer applications for teaching English. I choose to teach by employing various methods without focusing on utilizing digital literacy tools. I know few procedures to use applications. I choose other ways of teaching. (T2)

## 2. Different comprehension levels

Young learners were considered to have different comprehension levels when learning English via digital literacy tools. Teacher 5 believed that comprehension levels among young learners influenced the quality of received knowledge.

In my class, many young learners are categorized into different levels when I ask them to read or to talk. The difference affects the way they interpret texts or messages from the internet. (T5)

## 3. Lack of policy support

Schools were not provided with supporting literacy tools such as laptops or computers with internet connection or WiFi. Teacher 3 suggested that schools should provide laptops or other digital literacy tools for their young learners.

Better English learning begins when the learners are still young. Supporting tools such as laptops or computers are highly needed to introduce them to the tools. Excellent internet signals or WiFi have to be considered as important parts for comprehending information from online sources. (T3)

## 4. Lack of digital literacy experience

Both EFL teachers and young learners did not have much experience in utilizing digital literacy tools for learning English. EFL teachers reported that they lack knowledge in reading, writing,

talking, or listening to messages and texts provided on the internet. For teacher 1, lack of digital literacy experience was influenced by daily habits and formal regulations.

I agree that experience helps young learners to be successful. What if the learners lack literacy experiences? Surely, it gives a negative impact on giving instruction to the learners to promote literacy via digital tools. (T1)

## 4. Discussion

The results of this study reveal that there are benefits of digital literacy for young learners in learning English. First, it is noted that young learners are able to improve their writing skill. They employed digital literacy tools such as social networking applications (e.g., *Facebook, WhatsApp*) either outside the classroom or at home. These internet applications also motivated the young learners to use English whenever they wrote a sentence or a word in their social network walls. This is in line with the findings of Vikneswaran and Krish's (2015) study, according to which social networking sites such as *Facebook* improve learners' motivation to write in English. One factor that affects learners' preferences to use such social networking applications is its capacity for direct visual response. Other studies (Bloch, 2008; Yancey 2009; Kabilan, Ahmad, & Abidin, 2010) show that social networking tools such as *Facebook* promote learners' better writing performance, as they get practice both inside and outside the classroom. In this case, EFL teachers should have ideas to integrate social networking applications into EFL classrooms (Ibarra, 2018).

The study depicts that digital habits help to improve young learners' literacy through interesting online reading materials. This supports the view of Lewin (1997), who states that young learners are directly motivated with online reading materials that are designed with full-color images and animated texts. In the same vein, Rello & Bigham (2017) argue that colorful reading texts have a positive impact on learners' reading skill. Moreover, Dzulkifli and Mustafar (2013) emphasise the strong relationship between colors, attention, and memory performance. Colors increase attention and aid memorization, which is appropriate for learners' reading literacy skill.

As for listening skills, this study reports that digital literacy tends to allow young learners to be more engaged with English songs and podcasts on the internet. English songs and podcasts improve young learners' listening skills (Cameron, 2001; Johnstone, 2002; Demirel, 2004, Klein, 2005) and working with English songs are one of the effective techniques for learning listening skills among learners. The current findings corroborate the research by Chi and Chan (2011) and McMinn (2008), who claim that podcasts help learners to improve their

listening skill and linguistic knowledge while reading available scripts. Other studies (Sze, 2006; Trinkle, 2008; Ng'ambi, 2008) argue that listening to recorded audio files such as podcasts is effective in making active listeners. This study also reveals that digital literacy develops young learners' spoken ability. Young learners are encouraged to listen to podcasts, songs, videos, or news from the internet. They tend to use their digital tools such as smart phones for interacting with others or listening to resources on the internet for fun (Asmali, 2018). This is in line with a study by Lawlor and Donelly (2010), which proved that podcasts can be utilized to improve young learners' speaking skills. Moreover, interactive, authentic videos are considered to be appropriate materials for teaching and learning process (Shahrokni, 2018) that enable young learners to talk in English.

Another important finding in this study is that digital literacy tools in terms of the internet provide young learners with authentic materials. The authentic materials contain native grammar usages that are paramount for young learners' grammatical competence. In the same vein, a study by Nushi and Eqbali (2017) found that EFL learners can learn English from authentic materials which contain natural use and usage of English grammar. Authentic materials can be used by EFL teachers to develop young learners' listening, speaking, reading, and writing skills. Solano et al. (2017) argue that it is valuable for EFL teachers to integrate digital literacy tools for enhancing young learners' English skills. It is because young learners tend to use digital tools such as mobile phones for learning either inside the classroom or at home. For young learners, grammatical competence is the most important knowledge they prefer (Mospan, 2018) when they are reading such authentic materials.

As for the second focus of this study, the results indicate that there are significant barriers for digital literacy of young learners. One of the barriers is the difficulty of internet access. The learners from rural schools find it hard to access the internet due to low signals. This barrier does not allow them to develop their digital literacy through the use of the internet. This is in line with a study by Eryansyah et al. (2019), who found that digital literacy among learners is getting lower when they do not get sufficient internet access. Internet access which leads learners to high digital literacy is influenced by availability of digital tools but also by issues of financial support (Niikko and HavuNuutinen, 2009). Accessibility of learning technology such as the internet and availability of digital media should be balanced. It allows learners to develop their digital literacy (Littlejohn, Beetham, and McGill, 2012).

Another barrier for learners is that due to difficult content of materials they cannot be easily comprehended by the learners. The complexity of understanding digital materials (Williams, 2006) is a problem for learners. Bhat (2017) states that digital media literacy is

formed by the skill in using digital tools and writing contents such as digital texts. In the same vein, Horton (2008) suggests that learners need to be able to use digital media in order to comprehend all contents of digital resources. Learners should also learn digital skills needed for using digital media. Moreover, a study by Shopova (2014) found that a number of learners who begin studying at school need to increase their learning technology skill in order to improve their digital literacy. This barrier emerges because some learners do not have proper experience in using digital tools. Low comprehension and lack of knowledge lead the learners to lower digital literacy skills (Margaryan, Littlejohn, and Vojt, 2011).

Lack of policy support is another problem for learners when trying to increase their digital literacy skills. Policy support can be manifested through regulations, suggestions, ideas, and commitments. Lankshear and Knobel (2006b) stated that both teachers and learners should be encouraged to develop their digital literacy skills. This can be done through the improvement of the teaching and learning process and digital media. To facilitate that process, Kaeophanuek, Na-Songkhla, and Nilsook (2018) suggested that there are two ways of creating appropriate policy support. First, digital tools should be provided for learners. Each learner has to learn how to use digital tools in order to encourage their digital literacy skills. Second, digital literacy skills can be developed through the integration of digital literacy materials into the school curriculum.

#### 5. Conclusion

Digital literacy needs to be integrated into curriculum and syllabus. This enables the EFL teachers to prepare for some strategies to develop digital literacy for young learners. Such integration also allows the teachers to manage the use of digital literacy tools which might be both beneficial and disadvantageous for young learners. To do this, support from the stakeholders, teachers, learners, parents, and society is highly needed.

English learning by young learners constitutes self adaptation and self adoption towards strategies for implementing the four skills of listening, speaking, reading, and writing. The integration of digital media in learning English by young learners has to be accompanied by developing specific skills how to use both online and offline applications. These learning applications are useful when young learners are able to indulge themselves in creating a particular context for fulfilling a particular situation. In this case, young learners are expected to work with messages or texts, particularly on the internet, as core materials.

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#### References

- Apperley, T., & Beavis, C. (2011). Literacy into action: digital games as action and text in the English and literacy classroom. *Pedagogies: An International Journal*, *6*(2), 130-143.
- Asmali, M. (2018). Integrating technology into ESP classes: use of student response system in English for specific purposes instruction. *Teaching English with Technology*, 18(3), 86-104.
- Bataineh, R. F., & Baniabdelrahman, A. A. (2006). Jordanian EFL students' perceptions of their computer literacy. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2(2), 35-50.
- Bhat, R. I. (2017). Challenges of digital literacy in higher education. *International Journal of Multidisciplinary Research and Development*, 4(4), 324-325.
- Bloch, J. (2008). From the special issue editor. Language Learning & Technology, 12(2), 2-6.
- Brown, R., Scull, J., Nolan, A., Raban, B., & Deans, J. (2012). Young learners: mapping the beliefs and practices of preschool teachers in relation to early literacy development. *The Australian Educational Researcher*, 39(3), 313-331.
- Çam, E., & Kiyici, M. (2017). Perceptions of prospective teachers on digital literacy. *Malaysian Online Journal of Educational Technology*, 5(4), 29-44.
- Cameron, L. (2001). Teaching Languages to Young Learners. Cambridge: Cambridge University Press.
- Carrington, V. (2001). Emergent home literacies: A challenge for educators. *Australian Journal of Language and Literacy*, 23(2), 88-100.
- Carrington, V. (2005). The uncanny, digital texts and literacy. Language and Education 19(6), 467-482.
- Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011), Promoting language and literacy in young dual language learners: research, practice, and policy. *Child Development Perspectives*, 5, 15-21.
- Chi, S. W., & Chan, W. M. (2011). Learning beyond the classroom: Language podcast as supplementary learning material. *Ubiquitous Learning*, 3(2), 21-39.
- Churchill, N. (2016). Digital Storytelling as a Means of Supporting Digital Literacy Learning in an Upper-Primary-School English Language Classroom. Retrieved from <a href="https://ro.ecu.edu.au/theses/1774">https://ro.ecu.edu.au/theses/1774</a>
- Davidson, C. (2009). Young children's engagement with digital texts and literacies in the home: Pressing matters for the teaching of English in the early years of schooling. *English Teaching: Practice and Critique*, 8(3), 36-54.
- Demirel, Ö. (2004). *Teaching Modern Foreign Languages: Language Passport, language Biography, Language Dossier*. 2nd ed. Ankara, Turkey: Pegem A Publishing.
- Downes, T. (2002). Children's and families' use of computers in Australian homes. *Contemporary Issues in Early Childhood*, 3(2), 182-196.
- Dzulkifli, M. A., & Mustafar, M. F. (2013). The influence of colour on memory performance: a review. *The Malaysian Journal of Medical Sciences: MJMS*, 20(2), 3-9.
- Education Development Center (EDC). (2018). Young Learners with Technology. New York: EDC.

- Eryansyah, E., Erlina, E., Fiftinova, F., & Nurweni, A. (2019). EFL students' needs of digital literacy to meet the demands of 21stCentury Skills. *Indonesian Research Journal in Education*, 3(2), 442-460. <a href="https://doi.org/10.22437/irje.v3i2.8297">https://doi.org/10.22437/irje.v3i2.8297</a>
- Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93-106.
- Eshet-Alkalai, Y. & Amichai-Hamburger, Y. (2004). Experiments in digital literacy. *Cyber Psychology & Behavior*, 7(4), 421-429.
- Ferrari, A. (2012). *Digital Competence in Practice: An Analysis of Frameworks*. Luxembourg: Publications Office of the European Union. doi:10.2791/82116
- Gilster, P. (1997). Digital Literacy. New York: Wiley.
- Hargittai, E. (2008). An update on survey measures of web-oriented digital literacy. *Social Science Computer Review*, 20(10), 130-137. https://doi.org/10.1177/0894439308318213
- Horton, F. W. Jr. (2008). Understanding Information Literacy: A Primer. Paris: UNESCO.
- Ibarra, F. D. E. (2018). Is Facebook beneficial for writing practice? Ecuadorian polytechnic students speak up! *Teaching English with Technology*, 18(3), 3-17.
- Johnson, R. C. & Tweedie, M. G. (2010). Could phonemic awareness instruction be (part of) the answer for young EFL learners? A report on the Early Literacy Project in Malaysia. *TESOL Quarterly*, 44, 822-829.
- Johnstone, R. (2002). Addressing 'the Age Factor': Some Implications for Language Policy. Strasbourg, France: Council of Europe.
- Jolls, T. (2008). The Impact of Technology on Character Education. New York: Center for Media Literacy.
- Jones-Kavalier, B., & Flannigan, S. (2006). Connecting the digital dots: Literacy of the 21st century. *EDUCAUSE Quarterly*, 29(2), 8-10. Retrieved from: <a href="https://er.educause.edu/media/files/articles/2006/4/eqm0621.pdf?la=en&hash072FD518E173153E68975F73DA646847D97362">https://er.educause.edu/media/files/articles/2006/4/eqm0621.pdf?la=en&hash072FD518E173153E68975F73DA646847D97362</a>
- Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for learning of English in institutions of higher education? *Internet and Higher Education*, 13, 179-187.
- Kaeophanuek, S., Na-Songkhla, J., & Nilsook, P. (2018). How to enhance digital literacy skills among information science students. *International Journal of Information and Education Technology*, 8(4), 292-297.
- Kleemans, M. & Eggink, G. (2016). Understanding news: the impact of media literacy education on teenagers' news literacy. *Journalism Education*, 5(1), 75-88.
- Klein, K. 2005. Teaching young learners. English Teaching Forum, 43(1), 12-17.
- Kress, G. & Jewitt, C. (Eds.) (2003). Multimodal Literacy. New York: Peter Lang.
- Kurniawati, N., Maolida, E. H., & Anjaniputra, A. G. (2018). The praxis of digital literacy in the EFL classroom: digital-immigrant vs digital-native teacher. *Indonesian Journal of Applied Linguistics*, 8(1), 28-37. doi:10.17509/ijal.v8i1.11459
- Lankshear, C. & Knobel, M. (2006a). New Literacies: Everyday Practices and Classroom Learning. Maidenhead: Open University Press.
- Lankshear, C., & Knobel, M. (2006b). Blogging as participation: The active sociality of a New Literacy. Presented to the *American Educational Research Association*, April 8-12, San Francisco, CA.

- Lawlor, B., & Donnelly, R. (2010). Using podcasts to support communication skills development: A case study for content format preferences among postgraduate research students. *Computers & Education*, 54(4), 962-971.
- Lawrence, S. A. (2013). Exploring teachers' perceptions of literacy and use of technology in classroom practice: analysis of self-reported practice in one school district. *Journal of Literacy and Technology*, 14(1), 51-71.
- Lewin, C. (1997). Evaluating talking books: Ascertaining the effectiveness of multiple feedback modes and tutoring techniques. In C. K. Kinzer & K. A. Hinchman & D. J. Leu (Eds.), *Inquiries in Literacy Theory and Practice: Forty-sixth Yearbook of the National Reading Conference* (pp. pp. 360-371). Chicago: National Reading Conference.
- Li, T. Y. (2014). The computer literacy and use: The case of Taiwanese pre-service elementary school English teachers. *International Journal of English Language Education*, 2(1), 128-142.
- Littlejohn, A., Beetham, H., & McGill, L. (2012). Learning at the digital frontier: A review of digital literacies in theory and practice. *Journal of Computer Assisted Learning*, 28, 547-556.
- Margaryan, A., Littlejohn, A., & Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education*, *56*, 429-440.
- Marsh, J. (2006). Emergent media literacy: Digital animation in early childhood. *Language and Education*, 20(6), 493-506.
- McMinn, S. W. J. (2008). Podcasting possibilities: Increasing time and motivation in the language learning classroom. Retrieved from <a href="http://www.eife-l.org/publications/proceedings/ilf08/contribution/improving-quality-of-learning-with-technologies/McMinn.pdf">http://www.eife-l.org/publications/proceedings/ilf08/contribution/improving-quality-of-learning-with-technologies/McMinn.pdf</a>.
- Meurant, R.C. (2010). iPad Tablet computing to foster Korean EFL digital literacy. *International Journal of u- and e- Service, Science and Technology, 3*(4), 49-62.
- Mifsud, L. (2006). What counts as digital literacy: experiences from a seventh grade classroom. In J. K. Nyiri (ed.), *Mobile Understanding: The Epistemology of Ubiquitous Communication* (pp. 133-143). Vienna: Passagen.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2002). *Qualitative Data Analysis: A Methods Sourcebook*. Los Angeles: Sage.
- Miller, S. (2007). English teacher learning for new times: digital video composing as multimodal literacy practice. *English Education*, 40(1), 61-83.
- Mospan, N. (2018). Mobile teaching and learning English A multinational perspective. *Teaching English with Technology*, 18(4), 105-125.
- Mudra, H. (2018). Pre-service EFL teachers' experiences in teaching practicum in rural schools in Indonesia. *The Qualitative Report*, 23(2), 319-344.
- Neumann, M. M., Finger, G. & Neumann, D. L. (2017). A conceptual framework for emergent digital literacy. *Early Childhood Education Journal*, 45(4), 471-479.
- Ng'ambi, D. (2008). Podcasts for reflective learning. In G. Salmon & P. Edirisingha (Eds.), *Podcasting for Learning in Universities* (pp. 132-145). Berkshire, England: Open University Press.
- Niikko, A., & Havu-Nuutinen, S. (2009). In search of quality in Finnish pre-school education. *Scandinavian Journal of Educational Research*, 53(5), 431-445.

- Nushi, M., & Eqbali, M. H. (2017). Duolingo: a mobile application to assist second language learning (App Review). *Teaching English with Technology*, 17(1), 89-98.
- Pahl, K. & Rowsell, J. (2005). *Literacy and Education. Understanding the New Literacy Studies in the Classroom.*London: Paul Chapman Publishing.
- Paquette, K. R., & Rieg, S. A. (2008). Using music to support the literacy development of young English language learners. *Early Childhood Education Journal* 36, 227-232.
- Parette, H., Hourcade, J., Dinelli, J., & Boeckmann, N. (2009). Using Clicker 5 to enhance emergent literacy in young learners. *Early Childhood Education Journal*, *36*, 355-363.
- Perdana, R., Yani, R., Jumadi, & Rosana, D. (2019). Assessing students' digital literacy skill in senior high school Yogyakarta. *Indonesian of Education Journal*, 8(2), 169-177, Doi: <a href="http://dx.doi.org/10.23887/jpi-undiksha.v8i2.17168">http://dx.doi.org/10.23887/jpi-undiksha.v8i2.17168</a>
- Pratolo, B. W., & Solikhati, H. A. (2020). The implementation of digital literacy in Indonesian suburban EFL classes. *International Journal of Scientific and Technology Research*, 9(1), 1508-1512.
- Rahmah, A. (2015). Digital Literacy Learning System for Indonesian citizen. *Procedia Computer Science*, 72. doi: 10.1016/j.procs.2015.12.109
- Rello, L., & Bighma, J. P. (2017). Good background colors for readers: A study of people with and without dyslexia. ASSETS '17 Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility, pp. 72-80.
- Sen, E. (2017). *Teacher Perceptions of Digital Literacy in an L2 Classroom*. Thesis project with specialization on English Studies in Education. Malmö: Faculty of Education and Society, Malmö University, Sweden.
- Seok, S. & DaCosta, B. (2016). Perceptions and preferences of digital and printed text and their role in predicting digital literacy. *Asian Social Science*, 12(5), 14-23.
- Shahrokni, S. A. (2018). *Playposit*: Using interactive videos in language education (App Review). *Teaching English with Technology*, 18(1), 105-115.
- Shopova, T. (2014). Digital literacy of students and its improvement at the university. *Journal on Efficiency and Responsibility in Education and Science*, 7(2) 26-32, doi: 10.7160/eriesj.2014.070201.
- Skouge, J., Rao, K., & Boisvert, P. (2007). Promoting early literacy for diverse learners using audio and video technology. *Early Childhood Education Journal*, 35(1), 5-11.
- Solano, L., Cabrera, P., Ulehlova, E., & Espinoza, V. (2017). Exploring the use of educational technology in EFL teaching: A case study of primary education in the south region of Ecuador. *Teaching English with Technology*, 17(2), 77-86.
- Supratman, L. P., & Wahyudin, A. (2017). Digital media literacy for higher education students in Indonesia.

  International Journal of English Literature and Social Sciences, 2(5), 51-58. Doi: https://dx.doi.org/10.24001/ijels.2.5.7
- Sze, P. M.-M. (2006). Developing students' listening and speaking skills through ELT podcasts. *Education Journal*, 34(2), 115-134.
- Trinkle, C. (2008). Listening comprehension leads to reading success. *School Library Media Activities Monthly*, 24, 43-45.
- Turula, A. (2017). Learner autonomy as a social construct in the context of Italki. *Teaching English with Technology*, 17(2), 3-28.

- Vikneswaran, T., & Krish, P. (2015): Utilising social networking sites to improve writing: a case study with Chinese students in Malaysia. *Technology, Pedagogy and Education*, 25(3), 287-300.
- Walsh, M. (2008). Worlds have collided and modes have merged: classroom evidence of changed literacy practices. *Literacy*, 42(2), 101-108.
- Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education*, 34, 179-225.
- Williams, P. (2006). Exploring the challenges of developing digital literacy in the context of special educational needs communities. *Innovation in Teaching and Learning in Information and Computer Sciences*, 5(1), 1-16. DOI: 10.11120/ital.2006.05010006.
- Yancey, K. (2009). Writing by any other name. Principal Leadership, 10(1), 26-29.
- Zuroh, E. Z., & Liansari, V. (2017). Digital age literacy in elementary school. Proceedings of the *1st International Conference on Intellectuals' Global Responsibility (ICIGR 2017)*. DOI: <a href="https://doi.org/10.2991/icigr-17.2018.29">https://doi.org/10.2991/icigr-17.2018.29</a>