Digital literacy readiness: Voices of Indonesian primary and secondary English teachers

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ABSTRACT

The ways students learn nowadays have changed significantly since the Covid 19 pandemic in 2019. Students today need different ways of teaching as they also have different learning styles. This study is intended to investigate how much the Indonesian primary and secondary English teachers are technologically literate, identify the challenges they face in teaching using technology and describe their hopes and expectation in their professional work as English teachers. Questionnaires in the form of google form were used to collect the data from all the participants, while interview was used to collect the data from the selected participants. The findings showed that most of the participants possessed high level of digital literacy, suggesting that they had the skills needed to help them teach online classes using the available online teaching platforms. They seemed to enjoy teaching online classes as they were capable of exploiting the online resources as the teaching materials, developing the available resources and even creating the digital teaching materials and using it in their online classes. The most serious problem they had was lack of IT knowledge in regard with the new online teaching platforms and internet connection. If they had to use the new online teaching platform, they had to learn it on their own, usually through YouTube and teach how to use it to their students. The classic problem, the internet connection, still occurred among the teachers and it caused problems in delivering the teaching materials and assessing the students' work. This implies that the policy makers need to design professional development program which would help the Indonesia English teachers cope with their technological issues.

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1. Introduction

Recently there has been a spate of interest in the study of digital literacy among teachers and students as the impact of the development of information and communication technologies which increases massively in the 21 Century. According to Preston et al (2015a, 2015b) these phenomena of novel technologies refer to the use of a modern way called internet. Over the last years, the internet has been embedded in popular culture around the world among young and adults. Websites, YouTube, Wikipedia, and blogs are examples of internet-based outlets which people call for when they seek information. Email and various social media platforms have allowed instant communication among people across the world.

In addition to instant communication, the social networking sites of Website 2.0 technologies such as Instagram, Twitter, Facebook, and WhatsApp have let people collaborate by sharing and editing

online content. In the industrial domain, the internet has also helped people distribute their products more efficiently and faster. Using online application such as Zalora, Shoppe, Tokopedia, Amazon, Alibaba, etc. people do the trading, shopping, buying and selling. These phenomena indicate clearly how internet has become the central aspect of most human lives around the world today.

In the field of education, massive technology development also exists, especially in the process of teaching and learning held both in formal and informal classes. From the students' side, the use of modern technologies becomes a must nowadays because these students are categorized as digital natives. They were born and grew up during this millennium era taking their life path together with technology almost in their everyday life. Therefore, conducting classes by making use of digital tools such as applications and websites in their learning process can help them understand the materials better.

The ability of using tools of technology brings us to the concept of digital literacy. The term digital literacy was first defined as the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers (Hussein et al, 2017). Hsu (2019a, 2019b) says that digital literacy is the ability to effectively seek, navigate, analyse and make information about the using various forms of digital technology. Meanwhile, media literacy is concerned with helping students develop an informed and critical understanding of the nature of mass media, the techniques used by them, and the impact of these techniques (Tan, Xiang, Zhang, Teng, & Yao, 2012). In this present study, the use of the term digital literacy refers to the multiplicity of literacies associated with the use of digital technology which is used by the teacher and students.

In the context of education, one of the famous applications among teachers and students are Microsoft Office which includes Presentation PowerPoint, Microsoft Word, and Microsoft Excel, etc. These forms of applications are highly used by both teachers and students. Another form of technology which is often used is website. This technological phenomenal development in the field of education is the issue most researchers conduct the studies. The use of digital literacy also concerns the ability to use digital learning platforms. A study that was conducted to identify the learning of English in the 21st century found that the platforms could be employed to assist language learners in their writing activities (Ali, 2022). Specifically, its use was to gauge the students' Language Learning Strategies (LLS) for instance metacognitive, cognitive, and social strategies classified (Hamad, 2017). This study aims to describe the level of the digital literacy among Indonesian primary and secondary English teachers. The findings of this study are expected to contribute to the management and policy making for Indonesian primary and secondary English teachers. In addition, it can be used as a reference for establishing and planning proper teacher professional development program especially related to information and communication technology.

Digital literacy is not a new strategy for a student to gain the information and knowledge needed (Saubari & Baharuddin, 2016). The term digital literacy was first introduced by Gilster in the late 1990s. He said that it is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers (Spante et al., 2018; Alkali & Amichai-Hamburger, 2004). The capability to use the technology to allow us to right to use the materials is a key aspect of digital literacy. As a starting point, the obvious aspect of digital literacy is an internet. In simple terms, digital literacy is the ability to properly use and evaluate digital resources, tools and services and apply it to their lifelong learning process (Falloon, 2020; Bawden, 2008).

Pratolo and Solikhati (2021) investigated teachers' attitude towards digital literacy in EFL classroom. Their study endeavored to find out how the digital literacy was implemented in their English classes, to determine teachers' attitude in implementing the digital literacy, to scrutinize the challenges and the actions they took to cope with them. They found that computer and smartphone were the used the most often search for digital information. The teachers exhibited positive attitudes in the use of digital literacy for English teaching. They used syllabus as a major consideration, developed effective teaching, implemented multiple literacy and improved the four language skills. They also discovered lack of technology, lack of time and limited budget were acknowledged as hindrances in digital literacy implementation. To cope with these issues, the teachers in their study developed an early planning and support plan.

Ng (2012) explored the knowledge about educational technologies of a group of undergraduate students studying the course *Introduction to eLearning* at a university in Australia and how they

adopted unfamiliar technologies into their learning. The study explores the 'digital nativeness' of these students by investigating their degree of digital literacy and the ease with which they learn to make use of unfamiliar technologies. In her study, she employed mix method with pre-service teachers as the participants. She identified the technologies that should be understood by the students who would conduct a blended-learning mode such as for concept-mapping software, Prezi (presentation software), Hot Potatoes or SurveyMonkey software (for quiz creation) and VoiceThread and Wikispaces as collaborative platforms to respectively upload the students' digital stories and construct a collaborative WebQuest.

Phuapan, Viriyavejakul and Pimdee (2016) conducted a similar study which was held among students in nine universities in Thailand. In their study, they used digital competences from Bloom Taxonomy which refers to the technologies to answer their research questions. With a massive sampling of 400 undergraduate students as their participants, they sought to determine which digital literacy skills were most important in using digital technology, communications tools, and/or networks to access, manage, integrate, evaluate, create and communicate information in order to function in a knowledge society.

Alamsyah (2017) investigated the patterns of digital literacy among Sriwijaya University lecturers and its contribution to the implementation of eLearning. Employing a mixed method involving 30 lecturer participants and used offline and online questionnaires, in-depth interviews, and secondary data collection, he found that digital literacy competence among the lecturers was in a high position. This situation is the initial capital for the implementation of e-learning at the university. However, this situation has not contributed to the implementation of e-learning because the lecturers were not willing to adapt to the e-learning environment system and the policy makers had not been intervening several factors that contributed to e-learning implementation at the university level.

We identified a methodological gap in terms of the participants involved in the previous studies. Say for example, Pratolo and Solikhati (2021) involved junior high school teachers only as their research participants, while Alamsyah (2017) focused his study on the lecturers. Different from these two studies, Ng (2012) and Phuapan et.al. (2016) recruited undergraduate students as their informants. None of these studies looked into what the primary English teachers said about their readiness of digital technology. By nature, different participants with different background will offer different result. This present study is trying to fill in the gap by involving primary and secondary English teachers to speak out their voices and is conducted to answer the following research questions: (1) How is the digital literacy level of the Indonesian primary and secondary English teachers? (2) What kinds of technology forms do they use? (3) Why do they use such applications in their everyday teaching? (4) What kinds of problems do they face in using technology in their online teaching?

2. Method

The present study adopted a mixed methods approach as outlined by Creswell (2012) to investigate the digital literacy of Indonesian primary and secondary English teachers. A total of 36 Indonesian English teachers from across the country participated in the study. The data was collected through the use of both closed and open questionnaires, modified from the work of Son, Park, and Park (2017). The questionnaire consisted of six sections, including demographic information, perceptions and experiences with using Information and Communication Technologies (ICTs) in teaching, capability in using applications for teaching, frequency of using websites to support teaching, frequency of utilizing the services provided by these websites, and open questions about the use of applications to improve language skills and teaching. To help the participants be well informed with the questions and to avoid misunderstandings, the questionnaire was translated into Indonesian. The invitations were sent through WhatsApp messages along with the Google form link to the potential EFL teacher participants. Some of them responded quickly, some other filled up the form late. Therefore, by the time the data were analyzed, the recorded number of the participants was thirty-six. For their confidentiality purposes, none of their real names was used in any part of this study report. The data was analyzed using theme-based coding and quantified using percentages. The results were used to describe the digital literacy of the participating English teachers and to examine the challenges they faced in using digital technology for teaching performance.

3. Findings and Discussion

The process of collecting the research data was carried out using Google Form. The Google form was distributed to the targeted participants mainly through *WhatsApp*. Meanwhile, the interview was done via telephone call. Regarding the research instruments, to obtain the instruments' validity and reliability, in addition to the member checking techniques, we also conducted an intensive discussion with them. Table 1 depicts the blueprint of the instrument:

Table 1. The blueprint of the research instrument

Category	Item Quantity
Respondents' identity	9
Digital literacy	18
Capability in working with application	5
Frequency in using websites and applications	16
Frequency in using web services	11
Total	59

3.1 Research Participants' Demographics

Based on the data collected, as shown in the chart below, there were a total of 56 teachers who became the participants of the research. These participants comprised of 20 teachers of primary school (36%) and 36 teachers of junior high school (64%).
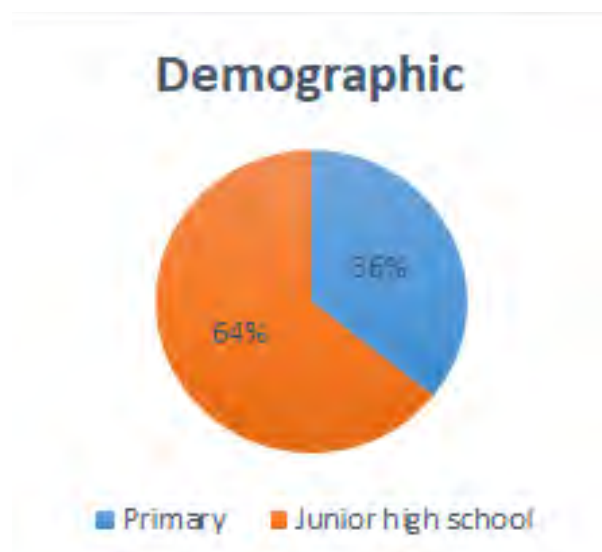

Fig. 1. Demographic

Meanwhile, seen from the age group category, among the participants, 8.9 percent were 51 years of age and above, 26% were within 41 and 50 years old, 41.1% aged between 31 to 40 years old, 19.6% were within the range of 25-30 years of age and 3.6% were under 25. Based on the demographic data, the participants within the range of 31 and 40 years of age ranked the first, followed by those falling in the range of 41 up to 50 years old. The least percentage was those of under 25 years of age with the percentage of 3.6%. The chart below depicts the spread of the age group among the participants.
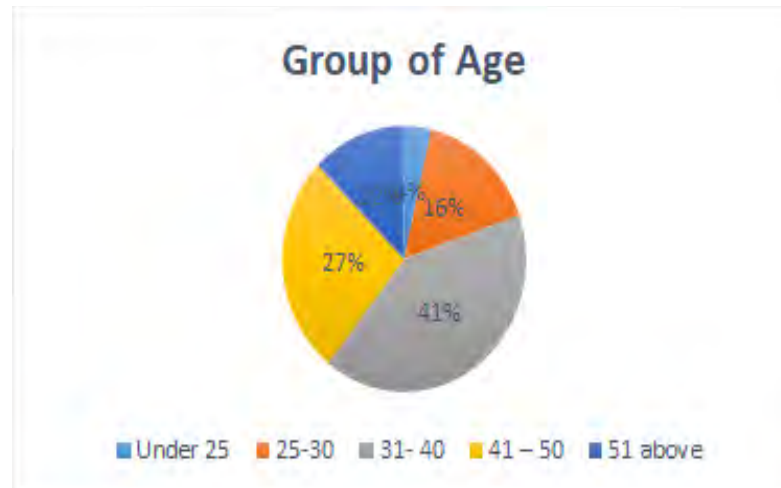
Fig. 2. Group of Age

Regarding the participants' teaching experience or duration of time serving as teachers, participants with more than 20 years of teaching experience ranked first reaching 25% and then followed by participants with teaching experience between 0-5 years who got the percentage score of 22%. Meanwhile groups of participants with teaching experience of 6-10 and 11-15 years ranked third each occupying 21%. The least rank was the group of participants with 15 to 20 years of teaching experience who gathered the percentage score of 11%.
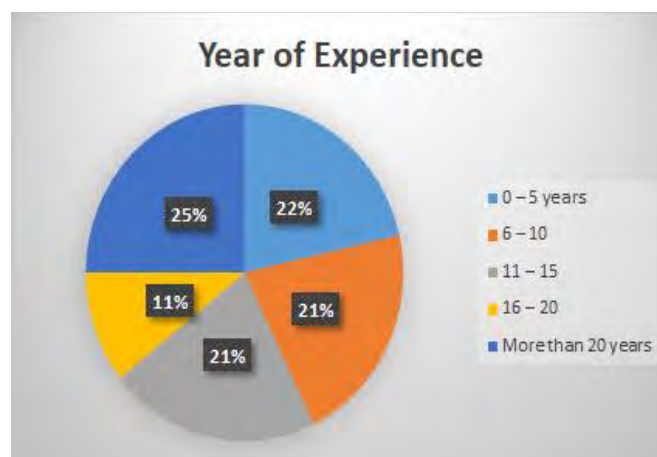

Fig. 3. Year of Experience

3.2 Research Findings

1) Research Question 1: Participants' digital literacy level

To know the level of the participants' digital literacy, after the data were collected, they were analyzed quantitatively first. This functions to determine the mean of each aspect researched. Next, categorization was made to help us categorize the participants' digital literacy level as shown in Table 2.

Table 2. Categorization of the digital literacy level

Mean	Category
55 - 72	Very high
37 - 54	High
19 - 36	Medium
18	Low

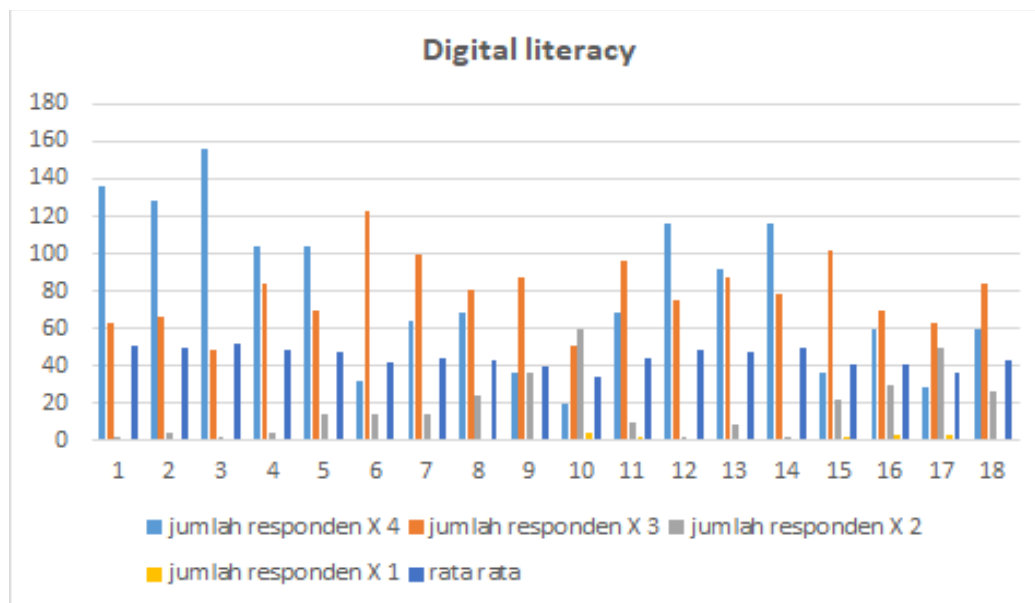The results of the data analysis are presented through the following chart:

Fig. 4. Participants' digital literacy level

Referring to the data displayed on Figure 4, it is found out that the level of digital literacy among the participants, in general, is in high category. This is based on the value of the mean which reached score of 44.27. Zooming into the table more closely, though, it is interesting to notice that among all items asked, the highest score the participants gave was item no 3 stating that ICT makes the process of teaching and learning more interesting. For this item, majority of the participants gave such a high score that it could reach the mean of 51.5. They comprised of 39 participants who chose *strongly agree*, 16 participants chose *agree*, and only 1 single participant chose *somewhat disagree*. On the contrary, for item number 10 stating "I own the technical skills I need to work with ICT for learning and to create artifacts (e.g. wiki, blog) that demonstrate my understanding of what I have learnt/mastered", the participants gave the least score as it only reached 33.75 as its mean. For this item, majority of the participants chose *somewhat disagree* (30 participants), 17 participants chose *agree*, and only 5 participants chose *strongly agree*. Interestingly, there were 4 respondents who chose *disagree*.

2) Research Question 2: Kinds of technology forms the participants use

To reveal the data of the kinds of technology forms the participants use, there were three main question categories given to them. They were questions related to capability in working with learning applications, frequency of using learning website/applications, and frequency in using web services.

a) Capability in working with learning applications

In terms of participants' capability in working with application, there were five questions asked under this category. These five questions referred to the idea of how the participants perceived themselves regarding their capability in working with various learning applications on internet. Specifically, these five questions were related to the capability in operating some specific application categories such as word processor, spreadsheet, presentation, video editing, and photo editing.

Based on the data collected, it was found out that, in general, the participants perceived themselves to be in "high (capable)" category with the average mean score reaching 40.15. Meanwhile, when viewed more closely, it appears that among the five learning application categories asked, the participants were most confident with application category number three i.e., presentation (power point presentation, keynote) and least confident with application category number four i.e., video editing (iMovie, Movie maker) with the average mean score of 45.25 and 32.75 respectively.

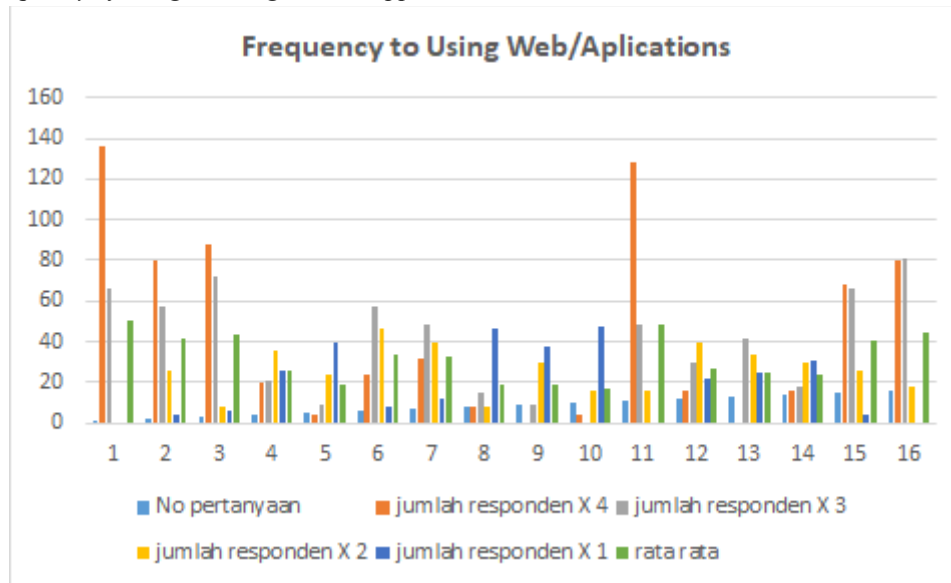*b)*   *Frequency of using learning website/applications*

Fig. 5. Frequency of using website/applications

Figure 5 shows the results of the data analysis regarding the types of applications used by participants in the learning processes they have conducted. Among 16 applications asked, the top three most used applications chosen by the participants were You tube, Google Classroom, and Zoom with average mean score of 50.5, 48 and 44.75 respectively. Meanwhile, the least used application was Cousera as it only reached the average mean score of 16.75.
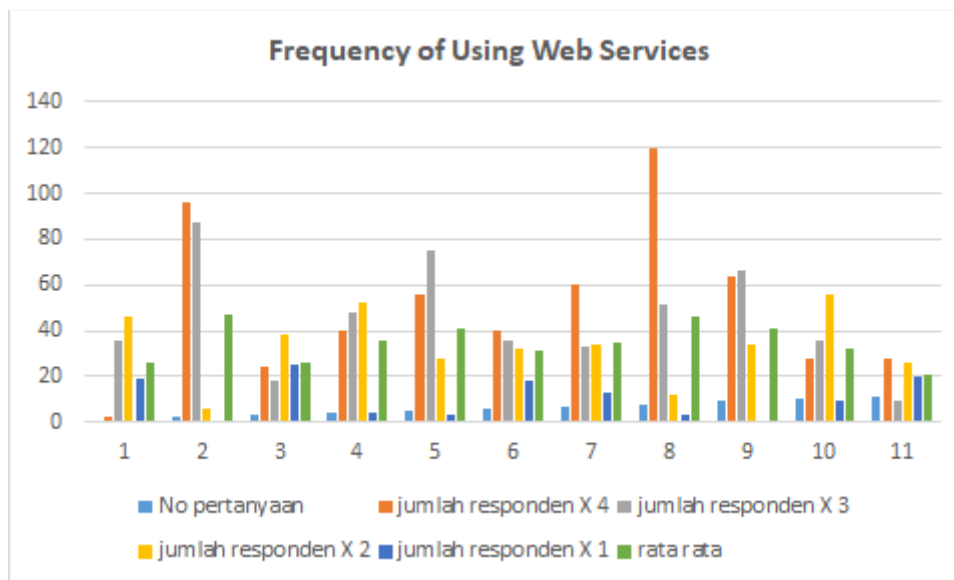
c)   *Frequency in using web services*

Fig. 6. Frequency of using website services

Figure 6 provides information related to data about the services available on websites/applications that the participants often used. Under this category, there were 11 questions asked about the website services which were most frequently used by the participants in their daily teaching practices. Among these 11 questions, question number two topped the survey with the average mean score reached 47.25. Most participants stated that they most often accessed websites such as online dictionaries and content specific websites as they considered these types of websites helped them in finding out references and contents for their classes. The second most accessed website type was the one which

was related to social media such as Facebook, Instagram, twitter, etc. with the mean score of 46.5. The participants said that they often used these kinds of social media for their teaching.

3) Question 3: Reasons of using applications for academic purposes

In regards to the research question 3, there were four issues found. They comprised the reasons for using the application for learning English, the reasons for using the applications for teaching, the language skills and the language teaching skills developed while using the applications.

When asked the questions about the reasons the participants had in using the application for learning and improving their English, 62.69% of the participants interviewed declared that the applications were user friendly. Furthermore, they stated that they did not have any difficulties in using them. In other words, the applications were easy-to-use applications. Meanwhile, 13.23% of the participants answered that the application provided them with sufficient facilities for them to use for teaching. For that, they said that they could post the pdf material, audio and audiovisual material quite easily. The rest 24.48% of the participants trusted the that application were the safe ones.

For the issue related to the reasons why the participants used the applications for teaching, 56% of the participants said that that the applications were easy to use and they did not have significant problems in using them for teaching. Meanwhile, 24% of the participants said that the applications had supporting facilities to help them teach online. This reason was supported by the other 20% of the participants who agreed that the applications provided them with the resources needed in teaching. They further said that having these applications in hand, they did not have to develop their own teaching material.

In dealing with the language skills developed during the use of the internet applications, 32.26% participants said that their listening skill improved significantly. Furthermore, 27.96% participants agreed that the use of applications could improve their reading skill and 20.43% participants believed that the use of applications could improve their speaking ability. Meanwhile 19.35% participants conceived that by using the applications, their writing ability would improve.

In regard to the teaching skills developed during the use of the application, 52.28% participants believed that their material management skill improved and 27.49% of them cerebrated that their skill in learning and teaching method improved. Meanwhile, the total of 8.33% participants agreed that their skill in class management developed well during the use of the application and 7.94% participants believed that all their teaching skills improved well by using the application. Surprisingly, there's only 3.96% conceived that their language mastery improved because of the applications use.

4) Research Question 4: Problems in using technology

In terms of weaknesses of the applications, the participants identified such weaknesses of the applications they used as: quota of data provided (28.57%), advertisement distraction (4.76%), too many resources to select (11.90%), need of parental and teacher's guide (26.19%), availability of learning facility on the application (9.52%), and internet signal or connection (19.05%).

As the research applied the interview technique in order to dig out more deeply about the issue, the following sub sections will discuss the findings of it. In regards to the problems faced by the participants when making use of the applications, there were three main problems found out i.e., lack of IT knowledge and facility, cellphone management, and problems with new applications.

a) Lack of IT knowledge and facility

Among the participants, lack of IT knowledge and facility became one of the prominent problems in using applications. One of the participants said that he did not have enough knowledge of the information technology and there's lack of facility in his mobile phone and laptop and the problem with the internet connection as well. This situation prevented him to join a teacher professional development upgrading program and workshops, including the one which was aimed at improving the teachers' capacity in using the IT.

> *...lack of knowledge on IT and lack of facility, for example the capacity of the cell phone or laptop that needs to be upgraded. Another problem emerges if we have to do our activity from home which is without wi-fi. There is unstable connection here, too. We have never joined workshops related to the use of application in teaching our students...*

...I never join workshop on using application to teach. Workshop where teachers can learn how to use applications to teach are needed. Also, it is necessary to have a sharing forum among teachers about what application feasible to teachers and students...

Moreover, he explained that due to his insufficient knowledge on IT and capacity of his cellphone, he preferred using the teaching materials available on YouTube to developing the materials on his own.

...I prefer using videos from YouTube because of my time limitation as a teacher and facility or memory of my cellphone. I don't make my own video, either. I have to spend lots of time to take the picture and audio, and also for editing it. If my students have problems in pronunciation, I ask them to send me a personal message, and to respond to it, I send them a voice note to give an example of how to say words or sentences.

One of the participants said that the use of online teaching application will only benefit the teacher who is familiar with the application, but the students will not get any benefit from it because they are not familiar with the platform. This is due to the fact that the application is only installed in the teacher's laptop.

A relatively new application may result in teaching and learning problems. Only the teacher knows how to use it, the students have not yet been familiar with it, or the application is only installed in the teacher's laptop. I usually make a backup material or manual of the material from the application. This is for face-to-face meeting in my class...

b) *Cellphone use management*

In terms of the cellphone management issue, it arises because of the fact that as children/students are not supposed to have their own cellphones, they depend on their parents to access their assignments from their teachers. If any of their parents always stay at home and do not have to go out to work, it will not be a big deal. But if both of the parents have to work, they will have to wait until their parents get home from work to learn the materials or do the assignments.

For online learning, we use two applications i.e., WhatsApp and Gform. There is a problem when the students share the cell phone with other family members. Sometimes when the parents arrived home, they forgot to tell their child. Further, the technical problem also occurs when the connection is not stable.

Using WhatsApp application, there often many messages posted so that some students often miss certain tasks. As a teacher, I remind them about the assignment to accomplish. I understand that the online learning environment or atmosphere is quite different from learning in the classroom. Monitoring and guidance are much more needed here.

We use user friendly applications, word for the materials and ppt including the video or voice note to explain the materials. The exercises are taken for the textbook. This is to anticipate the problems

c) *Problem with new application*

Problems with new applications became another kind of problem faced by participants when using internet applications. For common applications which are popular among teacher and students, most of the teachers do not have any problem. The problem emerges when they have to use a new application. It is not only that they have to learn on their own, they have to teach their students on how to use the application too.

Problems in online learning especially exists with relatively new applications...this does not happen on the use of google form, g classroom, zoom, quizzes. For the relatively new or unfamiliar one, the teacher needs to train the students to be familiar and able to use the learning application. A complicated application especially for 'senior' teachers is also a problem, there must be a workshop.

In my opinion, complicated here can be the activity that requires the teachers to install before using the application in the mobile phone or laptop, or complexity in inputting the data or materials in the application, or the data cannot be copied and pasted from word document to the application used. Another case is on the application using certain codes.

The workshop is to anticipate or to overcome students' boredom and it is to drive students' motivation to learn online.

Not all of us-the teacher are able to use the application, for example G-meet. But we do our best to do that, we learn from tutorials from YouTube.

This interview excerpt is very interesting. It was found not all teachers in her school was familiar with the online teaching platforms such as G-meet. But this pandemic situation could motivate them

to learn on their own, such as from you tube. It has proved that this pandemic forced them to be an independent learner in the use of online teaching platform.

3.3 Discussion

The findings of this study shows that the participating primary and secondary English teachers perceive that they are quite digitally literate as the average score reaches the category of "high" level. This result sparks some intriguing points to discuss further. From the positive side, this result is acceptable and relevant especially when it is related to the condition when this research was carried out i.e., during the Covid19 pandemic which had made all learning processes be conducted online. This is also the case with the participants in this study. Practically, due to the pandemic, these participants have been implementing online learning since the beginning of 2020. It means since then they have been working with technology intensively and using it in their teaching and learning process. Since then, they have been demanded to be able to adapt quickly to the existing situation. As a result, they learned quickly from any possible sources and implemented the teaching and learning process online. Long story short, online learning due to covid19 pandemic has forced teachers, including the participants in this study, to make themselves be familiar with technology and be more competent in using it as well. In fact, the use of online distance learning (ODL) is mushrooming as the effect of the pandemic. Zuraina et al. (2022) conducted a study in the use of Telegram as the alternative to support learning when the disease was widespread. The study found that its use promoted ease in teaching and learning, enhance communication between students-teachers by providing prompt responses, and be used to share information between students and teachers. The researchers concluded that Telegram as an ODL was very relevant during the crisis.

Furthermore, in terms of the form and type of technology the participants used, they have made their own milestone with their digital literacy development process during this pandemic. Starting from using *WhatsApp* more frequently and for teaching, they now, slowly but surely, have been moved to a higher level by applying more complex applications such as *YouTube, Google Classroom, Zoom, Quizizz* and some other types of online learning platform. Meanwhile, in terms of content, they also experienced a kind of quantum leaping regarding the use of educational technology. Searching and browsing various learning materials through internet, compiling them and packing them in media that are fully supported by technology, such as video, audio, or power point presentation and then presenting them in online settings via *Google Classroom, YouTube channel, LMS (Learning Mobile System)*, etc. are things that become very close to their lives and they do it daily in their classrooms. Of course, all these processes of learning, adapting, adopting and developing technology in their daily teaching practices have made them be more digitally literate and more confident in working with technology, and thus made them perceive that they have high level of digital literacy hierarchy.

However, seen from a different perspective, the result of the study rings a bell to a need of more discussions and further research in the field. As part of the questionnaire which asks about participants' digital literacy is based on the participants' personal perception plus due to the fact that perception is subjective in nature, the result this research collects may be influenced by several factors from the participants themselves. Personal characteristics might possibly affect perception the most such as a person's attitudes, personality, motives, interests, past experiences, and expectations. Therefore, additional research of the same topic but different research method is needed in order to balance the information.

The study also reveals that the top three most used applications chosen by the participants were You tube, Google Classroom, and Zoom. This result is in line with the findings of other researches in the field (see for example Tamim, 2013; Bardaki, 2019; Kabooha & Elyas, 2018). One of the factors is the fact that YouTube is very popular among teachers, including the participants in this study. One of the indicators is that there have been many researchers in the field of ELT and learning media who have conducted researches on the use of YouTube in education, including English education. Many studies have confirmed that teachers use You Tube quite often to support their daily teaching needs (Tamim, 2013; Bardaki, 2019; Kabooha & Elyas, 2018). Regarding the advantages of using YouTube, in general, it is an accepted fact that the use of YouTube can improve students' involvement and participation in the classroom and improve their learning strategies (Callow & Zammit, 2012). Furthermore, the use of YouTube videos is greatly effective especially for introductory courses as it can facilitate difficult concepts, and attract the attention of weak students as well as visual and special students (Kabooha, & Elyas, 2015; 2018; Heriyanto, 2015).

In addition, YouTube is a multidimensional resource that offers videos in all fields of knowledge that can be accessed effortlessly (Kabooha & Elyas, 2018). As videos on YouTube are limited in length, this makes them suitable for the tight classroom's time. Studies have also examined the effect of YouTube on autonomous learning (Hafner & Miller, 2011). Berk (2009) argues that the verbal and visual elements provided by the online video clips match the idiosyncrasies of the Net Generation of learners and address their different learning styles.

This study has found that in regard with the use of application for learning most of the participants considered the applications were user-friendly. It suggests that most of the teachers have high level of digital literacy as reflected in their ability to use the digital technologies (Martin's, 2005; Ng, 2012). This is very important in making the online teaching successful. With the skill of using digital technologies, the teachers can create, develop or select the materials suitable and appropriate with the level of the students. They will ensure that the materials are within the students' reach to learn. This will help the students acquire the content of the subject more easily. In other word, the teachers help prepare the students to face a globalized and multilingual world (Godwin-Jones, 2016). Nevertheless, teachers are required to employ various techniques in class to boost motivation, in particular intrinsic motivation, among students. In the use of Canva; an online graphic design tool, Ali (2022) found the infographics enabled language learners to be creative due to the interesting features that are available in the application. Therefore, teachers should not be teaching writing by merely asking students to write sentences. Yet, teachers could also ask their students to use infographics to express their thoughts and ideas.

The most serious problem faced by the teachers is their IT knowledge and the facility in their communication devices, such as mobile phone. Their skill in using the online teaching platforms is crucial and reflect the level of digital literacy of the teachers (see Godwin-Jones, 2016; Martin's, 2005; Ng, 2012). This finding also shows that the IT facility of the teachers cannot guarantee the effectiveness of the online teaching due to the internet connection, which is sometimes interrupted and down. This confirms the finding of the study conducted by Huerta and Sandoval-Almazán (2016).

4. Conclusion

Covid-19 pandemic has forced the policy makers to close all the schools and apply work from home for all teachers. This affects the way how the students learn. Therefore, the students have to learn also from home. The online teaching is not an option anymore, it is mandatory due to the school closure. To make this online teaching and learning process run effectively and successful, the teachers have to be digital literate. This study was implemented, among others, was to assess how digital literate the Indonesian Primary and Secondary school teachers were. This finding could be used as a consideration for the policy makers to make rules and regulations related to online teaching and learning process Indonesian school system.

In general, the level of digital literacy of the teachers is in high category, suggesting that the teachers know very well how to use the online teaching application or platforms without any problems. They know how to prepare and or select the material from online resources, deliver it through the application to the students, assess and give feedback to the students, work etc. In term of the capability in working with the learning application, it was found that most of the participants capable, suggesting that they did not have any issues with the complexity of the application. They knew all the icons and their functions very well. This suggests that they could maximize the use of the application by the facilities provided. This affects the effectiveness and success of online teaching during the pandemic.

Among the available online learning resources and applications, YouTube was still the most frequently accessed as the learning resource. It is understandable as YouTube provides almost everything including the teaching and learning resources for all subject matters in the forms of interesting videos. Meanwhile, Google Classroom was the most favorite application for teaching, followed by Zoom. These two applications are user friendly and the ways how to use them are just so simple. They also provide upload and download facility which they can use for sharing and using the learning resources. Among the online resources available in the websites, online dictionary is the most popular among the teachers, followed by content specific websites. The online dictionary suggests more complete translation and examples of how words are used in sentences. This is so helpful for the teachers. The content specific websites such as British Council is very rich and so resourceful not only

for teachers but also for students. Among the social media, Facebook was still the champion, followed by Instagram and twitter. This suggest that teachers still need media to socialize themselves and at the same time search for teaching resources in those social media platforms. In terms of the problems, most of the teachers encountered issues with the lack of IT knowledge and facility including their unfamiliarity with the online learning platforms and internet connection and cell phone availability. These three issues became the major problems faced by primary English teachers in teaching online classes.

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