

**DIGITAL LITERACY ON STUDENTS' ELEMENTARY SCHOOL IN SD ISLAM PLUS  
YLPI PEKANBARU**

**A THESIS**

*Intended to Fulfill One of Requirements for the Award of Sarjana Degree in English  
Language Education of Universitas Islam Riau*



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## ABSTRACT

Selly, 2020. Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru.

**Keywords:** *Digital Literacy, Elementary School*

*Implementation of digital literacy in school environment nowadays meets a number of problems. Digital literacy requires extra supervision of children, because elementary school students are psychologically still looking for their identity, so they need guidance when reading reading content so they are not exposed to negative information. The aim of this research is to find out the the level of Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru.*

*Research method of this research is used qualitative by using questionnaire and interview. Questionnaire distributed from 37 students at SD Islam Plus YLPI. Students' perspectives on e learning are seen in six indicators, namely (1) creativity and innovation, (2) communication and collaboration, (3) research and information fluency, (4) critical thinking, problem solving, and decision making, (5) digital citizenship and (6) technology operations and concepts.*

*The result showed that from questionnaires, majority students were insufficient skill as many as 78,4%. 18,9% as basic skill. And least is 2,7% as digital literate category on level of students' digital literacy. Based on interview session, the result showed that students' digital literacy was generally low. Students do not like reading activities that more difficult to produce work and collaborate. Students' prefer reading chats on games, caption instagram/facebook, friends' chat on whatsapp groups and others that are more entertainment.*

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# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Problem

A number of parties made various efforts to improve digital literacy in the community. Actual efforts that have begun many years ago were carried out using various approaches to solve various issues related to digital problems. There are those who use a general approach, namely giving a briefing on digital literacy in general. Some also use a thematic approach, whether it is targeting certain content such as "anti-hoax", "internet security", or focusing on certain cohorts such as "teenagers" and "children", or directed to certain segments such as "teachers", "housewife". Increasing the level of public literacy, or making people digital literacy is indeed not a task that can be realized through just one or two approaches. However, it must be done through various sides (Kurnia & Astuti 2017).

Indonesian students' literacy skills are unfortunately not well developed. USAID (2008) reported that many Indonesian K-12 students displayed low critical thinking ability— they lacked the ability to reflect and evaluate information presented to them. This ability is paramount for students to be academically and professionally advanced (Spires & Bartlett, 2012). Spires and Bartlett contend that in an increasingly digital environment, students must acquire digital literacy skills that enable them to select and use digital tools that are suitable for their purposes. Echoing ILA, Spires and Bartlett view digital literacy as “a wide-ranging set of practices that enable

students to create, share, and understand meaning and knowledge” in a digital environment (Durriyah & Zuhdi, 2018).

According to ILA’s 2018 report, digital literacy tops the list as the most prescient topic to be addressed in literacy education. The report surveyed and interviewed researchers and literacy educators from around the world. The report also noted that there should be more attention given to strategic efforts for excellent literacy education. One of those efforts involves teacher preparation that equips student-teachers with skills to foster students’ literacy development. Specifically one that is concerned with digital technology (Durriyah & Zuhdi, 2018).

Digital literacies’ involve not just being able to ‘operate’ tools like computers and mobile phones, but also the ability to adapt the affordances and constraints of these tools to particular circumstances. In other words, while we may seem at times to focus quite heavily on the ‘digital’ part of digital literacies, that is, to well on the affordances and constraints of these new technologies, what we are really interested in is not the tools themselves, but the process of mediation, or, as others called it, mediated action (Scollon, 2001; Wertch, 1993), the process through which people appropriate these tools to accomplish particular social practices. (Jones & Hofner, 2012:19)

Coming to the 21th-century, we enjoys the advantages of data, information and knowledge from one hand, but from the other hand we are also perplexed by the information overload, information explosion, false information and misuse of knowledge. The convergence of portable personal technologies, unfiltered access to

information, and user-generated content profoundly impacts how this generation era grows and learns. There are more threats coming from contents shared through gadget, such as violence, cyber bullying, sexting, online predator and moral-value paradigm shifting (Rahmah, 2015).

Digital literacy education is an approach to answer this digital era challenges, FTAAP agendas, and overcome problems related to digital media and ICT utility. Building consistency in behavior of using digital media wisely needs understanding about what, why, and how the utilization must be held. Knowledge plays a causal role in attitude behavior consistency. This is the reason why digital literacy education should be conducted using learning system embedded with knowledge management with purpose to guide learners achieve knowledge understanding so that it can lead to attitude-behavior consistency (Rahmah, 2015).

Based on research conducted by UNICEF and the Ministry of Communication and Information in 2015, internet users in Indonesia who come from children and adolescents are predicted to be around 30 million. Teenagers are born and grow with social media as part of their lives and daily lives. Currently they are very dependent on the presence of social media. According to a social marketing agency, there were 72 million active social media users in 2015. The most popular social media is Facebook (Retnowati, 2015: 314-315).

On Facebook there are many communities, such as the community of mountain climbers, writing communities, and even the meme comics community whose contents are quite entertaining. This meme comics account contains images

(memes) and writing sometimes funny but have values to jerk readers to be more sensitive to social phenomena around. Not infrequently, the latest information can be obtained from the account. Meme comics is one of the accounts following by elementary students (childrens age 8 – 13). Regarding the psychological condition of children and adolescents, at that age, of course, readers have emotions that are unstable and easily affected. They are not reluctant to insult, say rudely to show disappointment, and hatred of news. This is the bad impact of digital literacy that is happening right now. The phenomenon of children and adolescents who cannot master their emotions swallows the existing news without thinking whether the news affects him or not. Very high curiosity that causes excessive hatred if someone preaches something that is contrary to the values and norms that apply (Pratiwi & Pritanova, 2017).

Implementation of digital literacy in school environment nowadays meets a number of problems. Firstly, At present the biggest challenges in the application of information literacy in schools come from internal schools, including the inadequate ability of teachers and school library staff in the field of information literacy, there is no school policy on information literacy programs, and no information literacy programs in school libraries, so that students do not have the ability to search, browse, process, and evaluate information effectively and efficiently. The low level of information literacy among students also has an impact on the rise of plagiarism in the school environment. Therefore, teachers as educators and school library personnel

as education staff must have good information literacy skills in order to teach information literacy skills to students.

Secondly, digital literacy requires extra supervision of children, because elementary school students are psychologically still looking for their identity, so they need guidance when reading Zcontent so they are not exposed to negative information. Lastly, lack of examples given by the outside school environment (such as home and playing environment) from the students' elementary school itself. Based on the results of observations of researchers, the reading culture in the home environment is less indicated by parents who are busy or do not have an interest in reading, so the child will imitate the lazy habit to read even though digital access is already owned.

Based on the explanation above, the researcher is interested in carrying out the research entitled "Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru".

## **1.2 Identification of the Problem**

The first, At present the biggest challenges in the application of information literacy in schools come from internal schools, including the inadequate ability of teachers and school library staff in the field of information literacy, there is no school policy on information literacy programs, and no information literacy programs in school libraries. The second, digital literacy requires extra supervision of children, because elementary school students are psychologically still looking for their identity,

so they need guidance when reading reading content so they are not exposed to negative information. The last, lack of examples given by the outside school environment (such as home and playing environment) from the students' elementary school itself. Based on the results of observations of researchers, the reading culture in the home environment is less indicated by parents who are busy or do not have an interest in reading, so the child will imitate the lazy habit to read even though digital access is already owned.

### **1.3 Focus of the Problem**

From the background stated, the researcher found the problem. To limit the problem in this research, the researcher focuses the research only focused on Digital Literacy on Students' Elementary School at SD Islam Plus YLPI Pekanbaru.

### **1.4 Research Question**

Based on the limitation of the problem explained, the researcher formulates the problem of the research as follow: what is the level of Digital Literacy at Students' Elementary School in SD Islam Plus YLPI Pekanbaru?"

### **1.5 Objective of the Research**

The general objective of the research is to find out the the level of Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru.

## 1.6 Significance of the Research

This research will be hopefully useful for the teacher, students, other researcher and readers. Some of those areas as following:

- a. This research is expected to help the process of teaching learning English, especially in digital literacy.
- b. This research is expected to provide the readers and teachers information about Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru.
- c. This research is expected to motivate the students to improve their digital literacy.

## 1.7 Definition of the Key Term

In order to avoid misunderstand and misinterpretation about the title of this research, would be better for the writer to define a number of terms used in the research.

### a. **Digital Literacy**

Digital literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process (Martin, 2006:155).

**b. Elementary School**

Elementary School (SD) is the most basic level in formal education in Indonesia.

Primary school is taken within 6 years, starting from grade 1 to grade 6. In the National Education System Law (UU No. 20, 2001).



## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### 2.1 Relevance Theory

##### 2.1.1 Definition of Digital Literacy

Digital literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process (Marti, 2006: 155).

Hague (2010: 2) also argues that digital literacy is the ability to create and share in different modes and forms; to make, collaborate and communicate more effectively, and to understand how and when to use good digital technology to support the process. In addition, Ba (2002) stated that digital literacy as a set of habits through which youngsters use information technologies for learning, work, and fun.

Digital literacy refers to the assortment of cognitive-thinking strategies that consumers of digital information utilize (Eshet, 2004). Other terms used alongside or sometimes synonymously with digital literacy include: 21st -century literacies, Internet literacies, multiliteracies, information literacy, information communication technologies (ICT) literacies, computer literacy, and online reading comprehension

(ORC). Each term has particular definitions, but common assumptions bring them together under the same theoretical umbrella of new literacies (Osterman, 2012).

### 2.1.2 The Essential Elements of Digital Literacies

According to Belshaw (2015) the essential elements of digital literacy are:

#### 1) Cultural

Cultural is placed top of the list. There are many different contexts that an individual may experience, not only over the course of a lifetime, but simultaneously. the *transitions* that are the hardest to learn. It's fairly straightforward to master facilitating group work or giving some lecture-style input. How to move seamlessly between these, however, is much more difficult. Likewise, moving between different digital environments is the thing that is problematic and takes time to learn. It can be very difficult to separate out all of the issues surrounding the personal and social aspects of technology. Something I am consciously avoiding in this book are issues surrounding access to digital devices and technologies. That's a whole other (and probably much weightier) book. The Cultural element of digital literacies is best acquired by being immersed in a range of digital environments. These environments should include those where different issues, norms and habits of mind are present. This ensures individuals have to modify their approach. Development can therefore be seen by the extent to which individuals can move increasingly quickly and seamlessly between these different digital environments.

## 2) Cognitive

As much as literacy has a social and communicative aspect, it is also very definitely about expanding the mind. As alluded to at the end of the previous section, having more tools (or ‘lenses’) allows individuals to enjoy and comprehend a greater slice of the digital world. To use the language-learning metaphor once again, there is a very real sense in which technical and cognitive processes need to be mastered in order to become ‘fluent’. These processes aren’t the goal in and of themselves, but grappling with them will always be a necessary part of developing digital literacies. One example of the importance of the Cognitive element of digital literacies comes from the ubiquitous ‘software menu’. This is a concept that relies on branching logic, something that fairly certain doesn’t exist in nature. It choose one option which leads to a series of suboptions.

## 3) Constructive

A third essential element of digital literacies is the Constructive element. As Colin Lankshear and Michele Knobel (2006) have pointed out, literacy is always about reading and writing something. To construct a thing is therefore a test for literacy. Allan Martin (2005) expands upon this when he states that literacy in a digital world involves using digital tools appropriately to enable constructive social action. It may seem like stating the obvious, but the physical world is very different from the digital world. There is, for example, no ‘undo’ feature in the physical world. Likewise, copying something takes effort and will be an analogue, imperfect version

in the physical world. Doing so in the digital world, on the other hand, takes virtually no effort and results in a perfect copy. An understanding of what it means to ‘construct’ something in a digital environment, therefore, must be differentiated from its counterpart in the physical world. The digital and the analogue are qualitatively different. Developing this constructive element of digital literacies involves knowing how and for what purposes content can be appropriated, reused and remixed. It is as much about knowing how to put together other people’s work in new and interesting ways as it is about understanding the difference between the digital and physical worlds.

#### 4) Communicative

Communicative element of digital literacies. All of the ‘essential elements’ are deeply interconnected, but it is evident just how symbiotic the Cultural and Communicative elements are. After all, communicating effectively using a particular digital technology involves knowing, understanding and applying certain norms and assumptions. These can vary subtly from (for example) social network to social network, or even between using a mobile phone compared to a landline.

#### 5) Confident

Confident element is instead something that can be focused upon in a similar way to the others. Whilst no element should be worked on purely in isolation, the Confident element involves connecting the dots. It involves understanding and

capitalising upon ways in which the digital world differs from the analogue. This can range from the simple (e.g. pressing CTRL-Z to undo an action) to more complex (e.g. creating a personal ‘brand’ using social media).

#### 6) Creative

The Creative element of digital literacies is about doing new things in new ways that somehow add value. It is about using digital technologies and techniques to create or achieve things previously impossible — or at least out-of-reach to most people. It is, to use a phrase borrowed from Ewan McIntosh, about turning people into ‘problem-finders’ rather than just ‘problem-solvers’.

#### 7) Critical

The seventh essential element of digital literacies, Critical, is about analysing the power structures and assumptions behind literacy practices. Communication in the online, digital world is markedly different from the offline, analogue world. Literacy practices in the latter centre mainly around the written text. If reading and writing is about encoding and decoding texts, then in the offline world, books, manuscripts and documents constitute these texts. Becoming more advanced in the Critical element of digital literacies involves thinking about your own literacy practices. It involves reflecting on how they have come about, what has influenced you, and how actions affect others.

### 2.1.3 Clasification of Literacy

According to Pietila (2014) literacy in education consist of:

#### 1) Digital literacy

These days, digital illiteracy is nearly as debilitating as traditional illiteracy. Digital devices like smartphones, tablets, and laptops have permeated every corner of our lives from work to school to personal relationships, and part of a well-rounded education includes being able to use these devices to achieve a variety of goals.

#### 2) Media literacy

Media creation and consumption is changing at a rapid pace. Someone who is “media literate” can adapt to new communication formats – whether that’s instant messaging, push notifications, wikis, online communities, blogs, or vlogs – and knows how to choose the most effective medium for communication in any given situation.

#### 3) Visual literacy

The ability to comprehend – and to create – videos, photos, infographics, and other visuals has become essential for daily life and career success.

#### 4) Data literacy

With the right tools and training, it’s easier than ever for students, parents, teachers, school leaders, and school partners to make informed decisions. Whether this looks like a student taking charge of her own growth or a teacher pinpointing specific skills his students need to enhance, data literacy could lead to a sea change in education.

#### 5) Game literacy

It won't be difficult to convince students of the merits of this unconventional new literacy. Online video games have been linked to above average scores in math, reading, and science, and some schools use games like Minecraft and SimCity to help kids develop fine motor skills, better navigation abilities, and problem-solving strategies. Gamification is on the rise, and students with this fluency will level up faster.

#### 6) Health and Financial literacy

No two literacies go hand-in-hand quite like these two. A strong financial position makes it easier to make healthy choices, and good health makes it possible to do the hard work necessary for financial stability. When it comes to health and financial literacy, simple rules of thumb ("spend less than you earn") and just-in-time learning (a financial aid workshop for high school seniors) have a big impact.

#### 7) Foundational literacy

This is literacy as it might traditionally understand it: reading, writing, and meaning-making. No matter how far we stretch the definition of literacy, these foundational skills – particularly those gained in the early years – are still the building blocks upon which other skills can develop.

#### **2.1.4 Digital Literacy Level**

The European Computer Driving License (ECDL) applies 3 levels of digital literacy rating measures, namely: (1) Perceived digital literacy; (2) Confidence of digital literacy; and (3) Actual digital literacy. Thus it is very clear that to know how literate a person is, it is necessary to apply a measurement tool. ECDL defines 3 measurement levels related to one's skills, namely  $> 91\%$  = 'Digitally Literate',  $> 91\%$  -  $< 70\%$  = 'Basic Skills',  $< 70\%$  = 'Insufficient skills'.

The skill level can be used as a basis for determining policy or program recommendations to be able to improve skills to the 'Digitally Literate' level. The California ICT Digital Literacy Assessments and Curriculum Framework (2008) apply 6 basic digital literacy elements, namely: Access, Manage, Integrate, Evaluate, Create, Communicate. Northstar Digital Literacy Project (NDLP) develops assessments that are used to assist teachers in compiling a digital literacy learning curriculum for adults or the elderly (Susanto and Proboyekti, 2016).

#### **2.1.5 Digital Literacy in Educational Institution**

In Indonesia, Digital literacy and ICT literacy education is conducted within IT curriculum in school for technical skills and informal blogs or portals for common knowledge in ICT. As learners need to become independent learners in an environment greatly shaped by ICT, it is inevitable that they will be pushed to adapt to the increasing complexity of the ICT landscape.

However, its implementation is limited by Indonesia's economic problem, complicated by limited quantity and quality of ICT infrastructure, and the low awareness and knowledge of the public on ICT. There are several initiatives engaged to ICT education for Indonesian citizens including digital literacy materials. First is ICT Watch with main objectives to promote skills and awareness for citizens to be able to negotiate and use the internet and web. A major ICT Watch program is Internet Sehat or Healthy Internet, which involves teaching safe online practices and productive use of the internet. SchoolOnffLine is initiatives that allow schools that lack an Internet connection to teach students computer and Internet use. For general technical skill, initiative Bisa Komputer<sup>5</sup> focuses in delivering article about ICT, online media, and website and application recommendation.

Digital Mommie delivers ICT article especially about blogging for particular target readers, the mothers. Aligned with mission to educate Indonesian citizens about digital literacy, there are other initiatives whose main objective is parenting education. Parenting topic becomes relevant with digital literacy education in 21st-century because of digital media and devices utility in children learning activities. Rumah Parenting (Yayasan Kita dan Buah Hati) and SEMAI2045 are both non-profit organizations concerning in parenting with awareness about negative content accessed and shared by kids and teens using digital media. Institut Ibu Profesional is a community for mothers aiming for a continuous quality improvement of themselves and families. It has 8.574 registered members from all over the country. Closed interaction based on mobile devices conducted with strict rules about how to

collaborate using mobile messaging. It's an example of digital literacy education delivered by creating supportive environment about how to be digitally literate for the learners (Rahmah, 2015).

Research on digital literacy is well documented (e.g., Coiro, et al., 2008). Recent developments have provided us with information about some digital literacy roles in literacy education. Major reports such as the Cambridge Assessment Report summarized several conclusions concerning digital literacy in literacy education. First, literacy education should encompass the teaching of print, media literacy, and digital technology. Second, literature is at the core of literacy teaching, and it should be taught within the context of digital discourse (Cambridge Assessment, 2013).

These conclusions emphasize that digital literacy is a vitally important skill that students in the digital age should acquire. What counts as digital literacy? Spire and Bartlett (2012) simplify the scope of digital literacy into three categories: finding and utilizing digital content, producing digital content, and disseminating digital content. These categories highlight complex skills and abilities that students must obtain. Skills such as critical thought and value judgment are very important for locating and utilizing digital content. Likewise, creativity, innovation, and understanding of sociological context are very critical for producing and disseminating digital contents. A number of studies have explored digital literacy in the context of teacher education.

Price-Dennis (2016) and Price-Dennis and colleagues (2014) investigated some efforts to prepare student teachers to integrate technology into literacy teaching.

Their findings reveal a gap between the availability and use of digital technologies in classrooms. The sentiment is shared by literacy researchers with similar interests (Bauer & Kenton, 2005; Doering, Hughes, & Huffman, 2003; Koc & Bakir, 2010; Lei, 2009; Wright & Wilson 2011). This gap in technology use is concerning when considering that technology is available and a part of students' daily lives.

Additionally, a lack of accommodation of digital technologies use in a teacher education program will not help student teachers to imagine how a pedagogy that involves digital technologies can be structured and implemented in an established learning environment (classrooms). Although limited in number, available research notably demonstrates that student teachers tend to be more sensitive to the use of digital technologies when they are accustomed to and are active users of the digital technologies (Collier, Foley, Moguel & Barnard, 2013; Hundley & Holbrook, 2013; Williams & Baumann, 2008).

We may conclude that what is pressing in promoting digital technologies in teacher education is the effort to instruct student teachers to learn “about, through, and with technology” (Cervetti, Damico, & Pearson, 2006: 383), including instruction on how to be active participant in digital literacy practices (Hundley & Holbrook, 2013). Meanwhile, other studies also present us with the possibility of managing an online learning environment (Juzwik et al., 2012) and its relation to promoting student teachers' confidence in writing skill (Norman & Spencer, 2005).

### **2.1.6 Development of cognitive in elementary school students'**

In the middle and final years children are a period of slow and relatively uniform physical growth until puberty changes begin to occur, about two years before the child becomes sexually mature, at this time growth is growing rapidly. Therefore, this period is often referred to as the "quiet period" before rapid growth before adolescence, although it is a period of calm, but this does not mean that during this period there is no meaningful process of physical growth (Mar'at: 2005) .

The thinking of children at school age develops gradually. In the past, children's thinking power was still imaginative and egocentric, so at this time children's thinking power developed towards concrete, rational and objective thinking. His memory becomes so strong that the child really is in a learning stage. According to Piaget's theory, the thinking of elementary school-age children is also called concrete operational thought, meaning mental activity focused on the objects of concrete or concrete events. In an effort to understand the surrounding environment they no longer rely too much on information from the five senses, because children begin to have the ability to distinguish what is visible (Mar'at: 2005).

In this period, children have developed 3 types of processes called operations, namely: Negation that isin the concrete operational period, the child understands the relationships between objects or circumstances with objects or other conditions. Reciprocal relationships namely children have known a causal

relationship in a situation. Identity, that is, the child is able to know one by one the existing objects (Mar'at: 2005).

There are several developments in cognitive development according to Mar'at (2005), namely:

1) Memory development.

During this period, children's short-term memory has developed well. However, there is not much improvement in long-term memory accompanied by limitations. To reduce these limitations, children try to use memory strategies, which are intentional behaviors used to improve memory.

2) Creativity development.

In this stage children have the ability to create something new. This development is strongly influenced by the environment, especially the school environment.

3) Language development.

During early childhood, language continues. Vocabulary and how to use sentences increase in complexity. This development is seen in the way of thinking about words, the structure of sentences and gradually the child will begin to use shorter and denser sentences, and can apply various grammar rules appropriately.

### 2.3. Relevance Study

In this part, the writer states the relevant studies which are possible in adding the readers view about digital literacy level in SD Islam Plus YLPI Pekanbaru. In this case, actually the writer never finds out or listens about the same research. But the

writer find a research close to this study so that the writer conclude that just the researcher herself that do this research.

### 2.3 Conceptual Framework

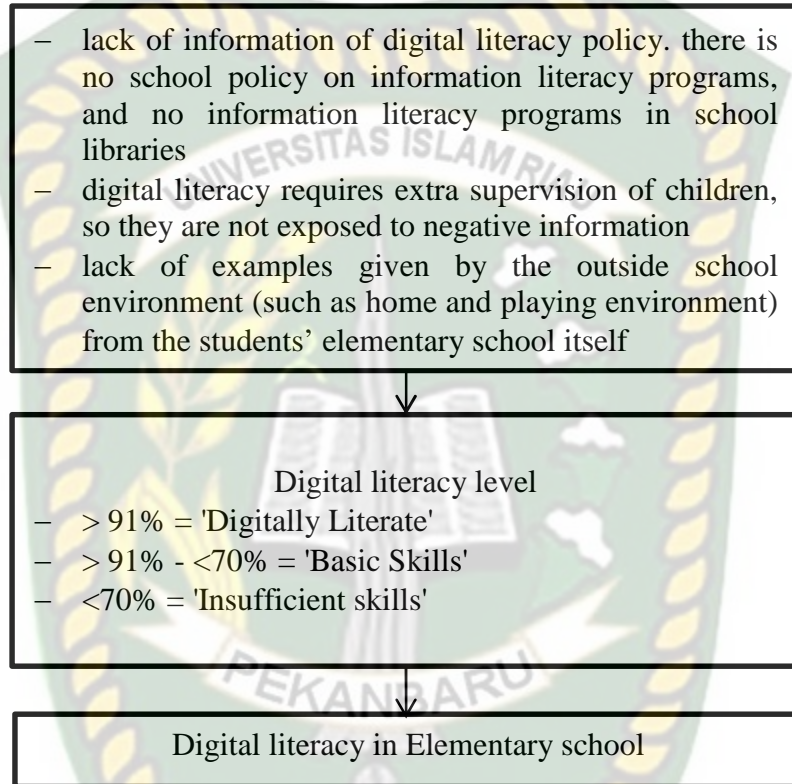


Figure 2.1 Conceptual Framework (Source: Susanto and Proboyekti, 2016)

The study is aim to find out the level of Digital Literacy on Students' Elementary School in Pekanbaru. Since there is no school policy on information literacy programs, and no information literacy programs in school libraries, so that students do not have the ability to search, browse, process, and evaluate information effectively and efficiently. The low level of information literacy among students also

has an impact on the rise of plagiarism in the school environment. Therefore, teachers as educators and school library personnel as education staff must have good information literacy skills in order to teach information literacy skills to students.



Dokumen ini adalah Arsip Milik :  
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## CHAPTER III

### RESEARCH METHOD

#### 3.1. Research Design

This research was descriptive quantitative approach. It is consisting of one variable only, which describes the level of digital literacy on elementary school. There are 6 indicators to define the level of digital literacy developed by Covello (2010) and accepted as digital literacy instrumental in International Society for Technology in Education (ISTE) NETS-S, Educational Technology Standards for Students.

#### 3.2. Source of Data

This research was conducted at SD Islam Plus YLPI Pekanbaru. Time location of this research was from March 2019. The population of this research is class V at SD Islam Plus YLPI Pekanbaru. The populations of this research are 43 students from two class.

**Table 3.1 Population of the research**

No	Class	Population
1	V.A	25
2	V.B	25
3	V.C	26

No	Class	Population
4	V.D	25
5	V.E	23
Total		124

The researcher chooses them as the population in this research. According to Arikunto (2005:116) research sampling as follows if less than 100 better taken all until the research is a population study if the number of large subject can be take around 10% - 30%. So the sampel of this study take in 30% of population.

$$N = 30\% \times 124$$

$$N = 37$$

So, it can be concluded that sample of this research is 37.

### 3.3. Data Collection Technique

In collecting the data, the researcher will do some steps which are describes as follow:

- a. The researcher come to the school and asking permission to teacher.
- b. The researcher come to classroom, greeting.
- c. The researcher will explain the goal of researcher' coming to the classroom.
- d. The researcher will distribute the questionnaire to the respondents.
- e. The researcher will give time to students' in doing that.
- f. The researcher will collect the questionnaires and analyze the data.

g. After the researcher collect all questionnaires. Next day, the researcher will interview several students by giving some questions about aspects of digital literacy.

**Table 3.2 Questionnaires Items Distributions**

No	Digital Literacy Dimension	Question Number	Total
1.	Creativity and Innovation	1,2,3,4	4
2.	Communication and Collaboration	5,6,7,8	4
3.	Research and Information Fluency	9,10,11,12	4
4.	Critical Thinking, Problem Solving, and Decision Making	13,14,15	3
5.	Digital Citizenship	16,17,18	3
6.	Technology Operations and Concepts	19,20	2
Total		20	

### 3.4. Data Analysis Technique

Before analysing the data, depend on the data collection technique, the researcher followed the procedures to collect the data which is necessary in the research as follows:

#### 3.4.1 Questionnaire

According Arikunto (2013:194) questionnaire are a number of written questions that are used to obtain information from respondents in the sense of report about their personality or things knows. The data achieve through questionnaire and it

analyze by describing how the students' perspective about digital literacy. To find out level of digital literacy, 6 indicators used based on the indicator of digital literacy level.

The researcher uses a formulation according to Arikunto (2013) formula as the bellow:

$$P = \frac{F}{N} \times 100\%$$

P = Percentage

F = Frequency of Students

N = Number of Students

After that, researcher make a categories based on The European Computer Driving License (ECDL) there are three categories:

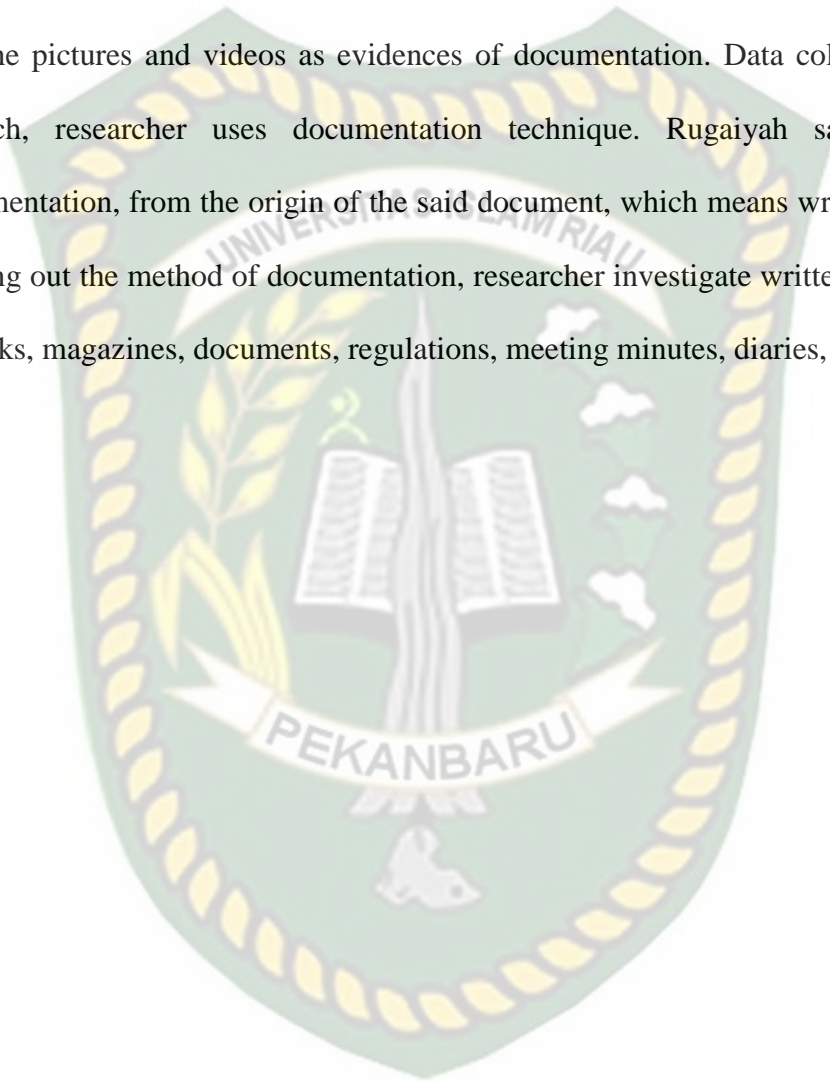
Percentage (%)	Criteria
> 91	Digital literate
> 91 - < 70	Basic Skills
< 70	Insuffienct Skill

### 3.4.2 Interview

After data collected, the data are checked, learnt. The research take a few students for giving some questions by interview. The researcher ask the students by 6 indicators of digital literacy. According to Lexy (2014) interview is a conversation with purpose, usually an interview is done by a person interviewer or more who will be the interview.

### 3.4.3 Documentation

After data collected, the data are checked, learnt, and compared to make necessary interpretation and it associated to their questionnare too. The researcher will take the pictures and videos as evidences of documentation. Data collecting in this research, researcher uses documentation technique. Rugaiyah said (2016:23) Documentation, from the origin of the said document, which means written goods. In carrying out the method of documentation, researcher investigate written objects such as books, magazines, documents, regulations, meeting minutes, diaries, etc.



## CHAPTER IV

### THE PRESENTATION OF RESEARCH FINDING

#### 4.1 Data Presentation

This chapter discusses the data analysis and findings of the research. The analysis is based on 37 students in SD Islam Plus YLPI Pekanbaru. The instrument of the research has been valid according to validity test run on SPSS. So the questionnaire of the reseach already valid and reliabel (appendix). The questionnaire compared four indicators with a total 20 structured closed questions that were developed to ensure objectivity of data. The validity test results for the 20 statement items are as follows:

**Table 4.1 Validity Test of the Instrument**

No	R count	R table	Result
1	0,692	0.267	Valid
2	0,830	0.267	Valid
3	0,726	0.267	Valid
4	0,885	0.267	Valid
5	0,801	0.267	Valid
6	0,665	0.267	Valid
7	0,762	0.267	Valid
8	0,839	0.267	Valid
9	0,846	0.267	Valid
10	0,875	0.267	Valid
11	0,782	0.267	Valid
12	0,860	0.267	Valid
13	0,826	0.267	Valid
14	0,676	0.267	Valid
15	0,802	0.267	Valid

No	R count	R table	Result
16	0,771	0.267	Valid
17	0,875	0.267	Valid
18	0,899	0.267	Valid
19	0,796	0.267	Valid
20	0,848	0.267	Valid

Source : SPSS 24, 2019

From table above it can be concluded that r count of the 20 items is more than r table. r count values each item are; 0.692; 0.830; 0.726; 0.885; 0.801; 0.665; 0.762; 0.839; 0.846; 0.875; 0.782; 0.860; 0.826; .676; 0.802; 0.771; 0.875; 0.899; 0.796; and 0.848. As for the value of r table is 0.267.

This research aimed to find out the the level of Digital Literacy on Students' Elementary School in SD Islam Plus YLPI Pekanbaru. Data collected done by questionnaire and interview. According to Covello (2010) students ' digital literacy has 6 indicators, such as (1) creativity and Innovation, (2) Communication and Collaboration, (3) Research and Information Fluency, (4) Critical Thinking, Problem Solving, and Decision Making, (5) Digital Citizenship and (6) Technology Operations and Concepts.

**a. Questionnaire**

**1. Creativity and Innovation**

**Table 4.2  
Creativity and Innovation**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
1	I love to read something from internet or media	3	8,1	4	10,8	13	35,1	10	27,0	7	18,9
2	I prefer reading something from media (such as smartphone or pc) rather than book	1	2,7	6	16,2	7	18,9	20	54,1	3	8,1
3	I like to doing new things in new ways after reading something through internet or media	1	2,7	4	10,8	12	32,4	12	32,4	8	21,6
4	I prefer to read moving or digital text than to read printed text	2	5,4	6	16,2	3	8,1	14	37,8	12	32,4

From the table 4.2 know that most of item in creativity and innovation is 27% disagree that “love to read something from internet or media”, 54,1% students’ disagree that “prefer reading something from media (such as smartphone or pc) rather than book”, 32,4% students disagree that “like to doing new things in new ways after reading something through internet or media” and 37,8% students disagree that “prefer to read moving or digital text than to read printed text”.

## 2. Communication and Collaboration

**Table 4.3**  
**Communication and Collaboration**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
5	After reading some information in internet source, I usually think about the information can affected me	2	5,4	5	13,5	5	13,5	14	37,8	11	29,7
6	I love to talk something that I have been read	3	8,1	6	16,2	7	18,9	15	40,5	6	16,2
7	I love to discuss to my friend about some information from internet	2	5,4	5	13,5	7	18,9	14	37,8	9	24,3
8	I comment based on my own thoughts about the news that I read on the internet or the media	1	2,7	5	13,5	9	24,3	17	45,9	5	13,5

From the table 4.3 showed that most of item in communication and collaboration is 37,8% disagree that “After reading some information in internet source and usually think about the information can affected”, 40,5% students’ disagree that “love to talk something that have been read”, 37,8% students disagree that “love to discuss to friend about some information from internet” and 45,9%

students disagree that “comment based on thoughts about the news that read on the internet or the media”.

### 3. Research and Information Fluency

**Table 4.4**  
**Research and Information Fluency**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
9	I always get various information easily through online media	3	8,1	6	16,2	6	16,2	16	43,2	6	16,2
10	If there is viral news on social media, I read carefully	2	5,4	5	13,5	2	5,4	12	32,4	16	43,2
11	I am interested in seeing other people's comments on social media about a news	2	5,4	5	13,5	5	13,5	17	45,9	8	21,6
12	If I'm interested in something, I will find out by reading the information in the media or the internet	2	5,4	6	16,2	5	13,5	11	29,7	13	35,1

From the table 4.4 showed that most of item in research and information fluency is 43,2% disagree that “always get various information easily through online media”, 43,5% students’ strongly disagree that “If there is viral news on social media,

I read carefully”, 45,9% students disagree that “interested in seeing other people's comments on social media about a news” and 35,1% students strongly disagree that “interested in something, I will find out by reading the information in the media or the internet”.

#### 4. Critical Thinking, Problem Solving, and Decision Making

**Table 4.5**  
**Critical Thinking, Problem Solving, and Decision Making**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
13	I find out the truth of the news that I hear by reading posts online	3	8,1	2	5,4	7	18,9	14	37,8	11	29,7
14	By reading news in online media, my knowledge will increase.	1	2,7	6	16,2	6	16,2	11	29,7	13	35,1
15	Before I decide to do something I consider first	1	2,7	10	27,0	6	16,2	8	21,6	12	32,4

From the table 4.5 showed that most of item in Critical Thinking, Problem Solving, and Decision Making are 37,8% disagree that “find out the truth of the news that hearing by reading posts online”, 35,1% students’ strongly disagree that “By reading news in online media, my knowledge will increase”, and 32,4% students strongly disagree that “Before I decide to do something I consider first”.

## 5. Digital Citizenship

**Table 4.6**  
**Digital Citizenship**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
16	I see people's responses to the news that I read	1	2,7	5	13,5	9	24,3	20	54,1	2	5,4
17	I use social media to socialize to my friends	2	5,4	7	18,9	7	18,9	11	29,7	10	27,0
18	I like to establish communication on social media to anyone to discuss a matter	1	2,7	5	13,5	3	8,1	16	43,2	12	32,4

From the table 4.6 showed that most of item in digital citizenship are 54,1% disagree that “people's responses to the news that read”, 29,7% students’ disagree that “use social media to socialize to my friends”, and 43,2% students disagree that “like to establish communication on social media to anyone to discuss a matter”.

## 6. Technology Operations and Concepts

**Table 4.7**  
**Technology Operations and Concepts**

No	The Statements	Strongly agree		Agree		Netral		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	F	%
19	I can use a computer and smartphone smoothly to access news or information	2	5,4	2	5,4	11	29,7	15	40,5	7	18,9
20	I read and study using a computer or smartphone	1	2,7	5	13,5	5	13,5	8	21,6	18	48,6

From the table 4.7 showed that most of item in technology operations and concepts are 40,5% disagree that “can use a computer and smartphone smoothly to access news or information”, and 48,6% students disagree that “read and study using a computer or smartphone”.

## 7. The level digital literacy at SD Islam Plus YLPI

To know the the level digital literacy at SD Islam Plus YLPI. There are three option choices “Strongly Agree, Agree, Netral, Disagree, and Strongly Disagree”. Researcher gave score 5, 4, 3, 2, 1 for each choice. Then the researcher sums each value given to determine the overall score for each statement. After that researcher used the frequency of every statement on this formula  $P = F/N \times 100\%$ . Then, researcher calculated the percentage of each level digital literacy. Finally, researcher

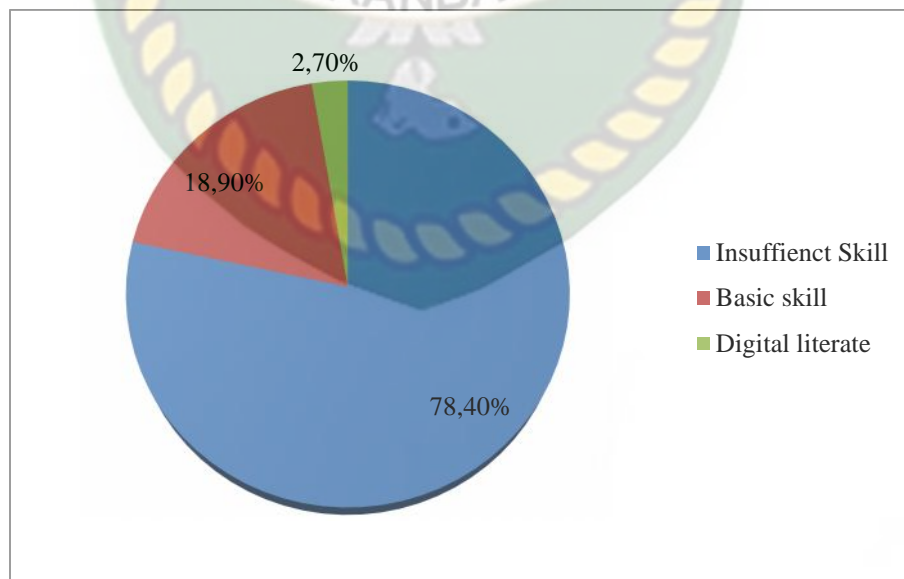
use SPSS for categorizing the level students' digital literacy using statistic descriptive.

**Table 4.7**

**Digital Literacy Level**

Digital Literacy Level				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Insuffienct Skill	29	78,4	78,4	78,4
Basic skill	7	18,9	18,9	97,3
Digital literate	1	2,7	2,7	100,0
Total	37	100,0	100,0	

From the table above there are three level. Majority students has “insufficient skill” 29 students or 78,4%, “basic skill” 7 students or 18,9%,. And least is digital literate category 1 students or only 2,7%.



## **b. Interview**

There are six questions about digital literacy at SD Islam Plus YLPI. In general, the response of the students of digital literacy is insufficient skill. In interview session researcher choose three students' and asking some question to gathering data. In the interview session, the researcher used Indonesian and the fifth grade elementary school students answered in Indonesian. Next, the researcher records the related answers and then concludes them in English.

Students' opinion towards digital literacy at SD Islam Plus YLPI generally insufficient skill. Based on the interview all students think that they don't really use digital tools in their daily life. One of the students said that:

*"I rarely use the internet at home, because Mom doesn't give me an Android".*

Other student also comments that:

*"I like reading news on the internet, but sometimes I don't understand a few words in it, I usually read with my sister at home. If my sister read something, I joined, but if my sister doesnot, I rather play the game."*

Furthermore the researchers also found a lack of students' reading on scientific information such as news, articles and others. Fifth grade elementary school students are more interested in reading chats on games, caption instagram / facebook, friends' chat on whatsapp groups and others that are more entertainment.

*“I'm prefer chatting on whatsapp groups, seeing instagram stories of friends or artists and social media posts”.*

So it can be concluded that, through the reading context that students have read, they tend not to practice it in everyday life. Except for things that are entertainment such as games and social media.

Students' use digital literacy on communication and collaboration was generally insufficient skill. It shows the experience of the student use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. All students' generally not interact, collaborate, and publish with peers/group, experts, or others employing a variety of digital environments and media. From 37 students, only one student that ever contribute in creating project with peer/group, she states that:

*“I once made a reading content like a 3D wall magazine (mading tiga dimensi) with friends from another school when there was a competition.”*

Based on the results of interviews and observations it is also known that the 3D wall magazine made by the students are also collaborative works of the results of literacy activities undertaken by students. Researchers found that students who were able to collaborate content into writing preferred reading activities into digital or non-digital content such as printed books, she states that:

*“I read whenever I want, there is no problem on a laptop / smartphone or even a printed book.”*

While other students who have never joined team collaboration in the context of literacy are generally less interested in reading activities. Student states that:

*“If I read I often get sleepy, so I usually only play games”.*

*“if I read continuously I will be bored”.*

Based on the results of the interview it is known that fifth grade elementary school students generally do not like reading activities that more difficult to produce work and collaborate. In general, the age of 5th grade elementary school social skills possessed are still in the category of getting along for understanding small talk. The expected digital citizenship has not been reached optimally, because its fulfillment has not yet reached the understanding of human, cultural, and societal issues related to technology and practice legal and ethical behavior.

#### **4.2 Discussion**

Based on the result of this research, the level of digital literacy at SD Islam Plus YLPI was in insufficient skill 78,4%. This finding related to (Lam & Wong, 2016) that found that students who enrol in English are strong in language and textual skills but weak in computer skills. In addition, students often attribute their lack of computer literacy to their discipline. It is common to hear from students that they are not expected to be ‘good at computer’, because they are language students. For a

more concrete example, students are often proficient in using word processing software, but are unfamiliar with spreadsheets. More specifically, basic functions in spreadsheet software (such as sum and average) are considered advanced functions and need to be explicitly taught.

The lack of skills or confidence becomes a self-fulfilling prophecy that they would end up failing to acquire new skills. A related challenge is that the students are inexperienced in reading and learning from error messages, software documentations or forum discussion. Lam & Wong (2016) consider it necessary to raise students' awareness of the learning strategies, often explicitly and through exercises, at earlier stages of the courses. Despite the recent developments of various platforms, e.g. popularity of smartphones and social media, the user experience as technology consumers does not often spill over to skills or interest in using technology in a productive manner.

In some statements it was found that the majority of students' answers were low in answering "If I'm interested in something, I will find out by reading the information in the media or the internet". This indicates that students who are not interested in continuing reading activities on digital media or the internet in order to find out something. This is in line with (Puspito, 2016) the digital literacy stage as indicated by the search for further information. Literacy-based learning accommodates learner-centered learning that is encouraged to search for information through various references, both print and digital. The implementation of digital

literacy in the school literacy movement is carried out in the stages of habituation, development, and learning.

Based on the statement "By reading news in online media, my knowledge will increase" it is known that 35.1% of students have a low score because they answered strongly disagree to the statement. This indicates that the Critical Thinking, Problem Solving, and Decision Making components in this study are still low. According to Zoraini (2014) the implementation of digital literacy programs in the school literacy movement is expected to encourage students and other school members to support 21st Century skills, as explained by the use of computers to support 4C.

According to Puspito (2016) the 4C of 21st century skills, namely (1) critical thinkers, students are encouraged to think critically and be able to solve problems by giving problems in learning, provoked questions, and trying to find solutions to problems by finding various information through the internet; (2) communicator, students are trained to understand and communicate ideas. After understanding what is learned, students are encouraged to share ideas that have become ideas as what they have obtained through literacy activities; (3) collaborators, the ability to work together to put work together with others, therefore with digital literacy students are trained to work together with others, other groups, other fields, by sharing information and experiences through computer media; (4) creator, the ability to be a creator is very needed to produce high quality work. Shao & Purpur, (2016) argues that information literacy is one of the higher order thinking skills (HOTS) needed to develop and support academic, professional and personal success. Getting used to

information literacy in learning and developing research skills independently is needed for professionals in marketing. Starting from the explanation above, the urgency of mastery of development and relative technological advances and research activities are an important part of the basic needs of each individual and support success in living through research activities. (Schroeter & Higgins, 2015).

The low score of students in digital literacy is certainly caused by many factors. According to Puspito (2016) The implementation of the school literacy movement certainly cannot be separated from supporting facilities and infrastructure. One of the facilities and infrastructure that supports multiliteration activities is the selection of media that is appropriate, interesting, and able to foster student understanding in obtaining, managing, and giving meaning to information that has been received.

## CHAPTER V

### CONCLUSION AND SUGGESTION

#### 5.1 Conclusion

The research is focused on digital literacy on students' elementary school at SD Islam Plus YLPI Pekanbaru. Analyzing the data is presented in the previous chapter.

The conclusion could be described as follow:

a. Questionnaire

Majority students were insufficient skill as many as 78,4%. 18,9% as basic skill. And least is 2,7% as digital literate category on level of students' digital literacy.

b. Interview

For interview, students' digital literacy was generally low. Students do not like reading activities that more difficult to produce work and collaborate. Students' prefer reading chats on games, caption instagram / facebook, friends' chat on whatsapp groups and others that are more entertainment.

## 5.2 Suggestion

Based on the result of analysis and conclusion above, the researcher would like to give suggestion not only for the English Teacher, but also for all elements of education:

a. For the Students

The information of the results showed that most students' level in digital literacy. So that, students expected to be able to learn use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

b. For the Teacher

The use and implementation strategy at the Schools to encourage students to apply digital tools to gather, evaluate, and use information. Encourage students to use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

## REFERENCES

- Arikunto, Suharsimih. (2005). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Ba, H., Tally, W., & Tsikalas, K. (2002). Investigating children's emerging digital literacies. *The Journal of Technology, Learning, and Assessment*, 1(4), 5-48.
- Belshaw. (2015). *The Essential Elements of the Digital Literacies*. Available at <https://doughelshaw.com/blog/ebooks/openbeta/> accessed 28 Januari 2019
- Dudeny, G., Hockly, N., & Pegrum, M. (2013). *Digital literacies*. Harlow: Pearson
- Erben, T., Ban, R., & Castañeda, M. E. (2009). *Teaching English language learners through technology*. New York: Routled
- Hague, Cassie dan Sarah Payton. (2010). "Digital Literacy Across the Curriculum: a Futurelab Handbook. United Kingdom" in <https://www.nfer.ac.uk/publications/FUTL06/FUTL06.pdf>, accessed 27 Januari 2019
- Jones, Rodney H. & Hafner, Christoph A. (2012). *Understanding Digital Literacies: A practical introduction*. Oxford: Routledge
- Kurnia, N & S.I. Astuti. (2017). Peta Gerakan Literasi Digital di Indonesia: Studi Tentang Pelaku, Ragam Kegiatan, Kelompok Sasaran dan Mitra. *Jurnal Informasi: Kajian Ilmu Komunikasi*. Volume 47. Nomor 2. Desember
- Mar'at, Prof.Dr. Samsunuwiyati. (2005). *Psikolinguistik Suatu Pengantar*. Bandung: Refika Aditama.
- Martin, A. (2006) Literacies for Age Digital Age in Martin & D. Madigan (eds), *Digital Literacies for Learning*. London: Facet
- Meyer, K., Hunt, S., Hopper, K. M., Thakkar, K., Tsubakopoulos, V., and Van Hoose, K., (2010). Assessing Information Literacy Instruction in the Basic Communication Course, *Communication Teacher*, 22:1, 22 - 34
- Osterman, M. D. (2012). Digital literacy: Definition, theoretical framework, and competencies. In M. S. Plakhotnik, S. M. Nielsen, & D. M. Pane (Eds.), *Proceedings of the 11th Annual College of Education & GSN Research*

- Conference* (pp. 135-141). Miami: Florida International University. Retrieved from [http://education.fiu.edu/research\\_conference](http://education.fiu.edu/research_conference)
- Pratiwi, N. & N. Pritanova (2017). Pengaruh Literasi Digital terhadap Psikologis Anak dan Remaja. *Semantik: Jurnal Ilmiah Program Studi Pendidikan Bahasa dan Sastra Indonesia*. <https://media.neliti.com/media/publications/130284-ID-pengaruh-literasi-digital-terhadap-psiko.pdf>
- Susanto & Proboyekti (2016). Identifikasi Digital Literacy Untuk Mengukur Kesiapan Jurnalisme Warga. *Jurnal ResearchGate*.
- Lam & Wong. (2016). Challenges for Digital Literacy in English Curriculum. *Journal of literacy*. 2(1)
- Puspito, D.W (2016). Implementasi Literasi Digital Dalam Gerakan Literasi Sekolah. *International Conference on Language, Literature, and Teaching*. ISSN 2598-0610
- Uswatun Khasanah1, & Herina (2019) Membangun Karakter Siswa Melalui Literasi Digital Dalam Menghadapi Pendidikan Abad 21 (Revolusi Industri 4.0)
- Stephen Covello (2010). A Review of Digital Literacy Assessment Instruments *University, School of Education/IDD & E IDE-712: Analysis for Human Performance Technology Decisions Dr. Jing Lei, Professor May 2, 2010*
- Indah Kurnianingsih1, Rosini2 & Nita Ismayati3 (2017). Upaya Peningkatan Kemampuan Literasi Digital bagi Tenaga Perpustakaan Sekolah dan Guru di Wilayah Jakarta Pusat Melalui Pelatihan Literasi Informasi. *JPKM, Vol. 3, No. 1, September 2017, Hal 61 - 76 DOI: <http://doi.org/10.22146/jpkm.25370> ISSN 2460-9447 (print), ISSN 2541-5883*
- Tati Lathipatud Durriyah & Muhammad Zuhdi (2018). Digital Literacy With EFL Student Teachers: Exploring Indonesian Student Teachers' Initial Perception About Integrating Digital Technologies Into a Teaching Uni. *International Journal of Education & Literacy Studies* ISSN: 2202-9478
- Amalia Rahmah (2015). The Third Information Systems International Conference Digital Literacy Learning System for Indonesian Citizen. *STT Terpadu Nurul Fikri, Indonesia*