

CHAPTER 1

INTRODUCTION

1.1 Background

Currently, the global world has entered the society 5.0 revolution which utilizes more modern technology, but still relies on humans as the main component. With humans as the main component, this concept will create a technological development that is able to minimize gaps in humans. According from the official website of CAO Japan, society 5.0 is a society that can solve various social challenges and problems by utilizing various innovations born in the era of the industrial revolution 4.0. This technological development can be utilized in the field of education, especially in the implementation of teaching and learning activities to achieve educational goals. So it is necessary to build the skills needed in the 21st century to help face all the problems that exist in this era of information ease. These 21st century skills include learning and innovation skills, skills in using technology and information media, and being able to work, and survive by using life skills (Wijaya, et al, 2016, p. 264). This is because education in the 21st century is more global and international. Every technological advance presents realistic theoretical constructions and insights in the development and improvement of knowledge, skills and attitudes among students and teachers (Boholano, 2017, p. 22).

In addition, the existence of the digital native phenomenon also requires teachers to have skills in integrating technology in the school environment as Chien, Wu & Hsu (2014) stated that students who are born digital natives have high expectations of the use of technology in their school environment, the younger the students, the higher their expectations in integrating ICT in the classroom. In this regard, the European Union emphasizes the use of technology in education, especially in social and cultural-based education because it is strongly influenced by rapid technological development. Technology-integrated education certainly needs to be supported by various elements of education, especially teachers. Therefore, teachers need to have skills in the fields of media, information, and ICT which are summarized in one skill called Digital Literacy (Suryanti, 2018, p. 6). This digital literacy is a form of interest, attitude and ability

of individuals in using digital communication technology to access, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to participate effectively in society. (Setyaningsih, et al, 2019, p. 1203).

This literacy is important for teachers to have, especially Pre-service Teacher who are millennials who are more ready and open to accepting and utilizing technology as a learning medium. This generation is also said to be a generation that is familiar with communication, media and digital technology (Budiaty, et al., 2018, p. 18). But in reality, several studies mention that teachers and Pre-service Teacher still have low digital literacy, both in the fields of media literacy, information literacy, and ICT literacy. For example, research conducted by Helleve (2019, pp. 1-2) explains that teacher education is reportedly not paying much attention to the digital competence of teacher education students. This illustrates that there has been no effort to build ICT literacy in teacher education students.

Seeing the low digital literacy of Pre-service Teacher and teachers in schools, of course, consistent and continuous efforts are needed to form good digital literacy. Many efforts have been made to shape this digital literacy such as the holding of the National Literacy Movement (GLN) by the Ministry of Education and Culture. This effort is made so that people have good skills in digital literacy. Digital literacy skills can be built by first knowing the extent to which people, especially teacher students, understand digital literacy.

Knowing the understanding of Pre-service Teacher in digital literacy is important for the digital literacy development process to improve the quality of teachers. At least through digital literacy, Pre-service Teacher have the knowledge and skills to use digital media, communication tools, or networks in finding, evaluating, using, creating information and utilizing it in a healthy, wise, intelligent, careful, precise and law-abiding manner.

Based on all the problems that occur on the importance of digital literacy for student teachers, it is necessary to conduct research on "Investigating Pre-service Teacher's Digital Literacy in Using learning Application".

1.2 Research Rationale

Along with the massive use of technology today, efforts to realize a society that is capable of technology and digital media that is correct and responsible are always interesting issues to be studied and analyzed together. One of them is by strengthening digital literacy by involving all component sectors, one of which is the role of the education sector.

According to Hague & Payton, 2011 "Digital literacy is an ability to utilize digital technology in a variety of different forms, to collaborate, to establish effective and efficient communication, and to be able to use digital technology properly". So digital literacy is the ability to use digital technology in a variety of different forms. someone who understands digital literacy is someone who can access, identify, manage, analyze, and evaluate digital resources. Through digital literacy, it can increase students' knowledge to be able to search, obtain, and analyze information spread in digital media so that they have a fairly good level of development of national insight. The faster the progress of information and communication technology, the faster it will produce digital literacy skills.

Therefore, everyone is obliged to understand that digital literacy is a very crucial and indispensable thing in the current era, therefore each individual must have the responsibility of how to use technology properly.

Especially for pre-service teacher who are led to become professional teachers in the future, which requires them to be able to use technology, do they currently have the ability, awareness, sensitivity, knowledge of digital technology? Pre-service teacher and teacher must have digital literacy, namely the ability to optimize the use of digital technology and communication tools to obtain and manage information that is very important in the learning process.

One of them is the utilization of various learning applications. Various kinds of applications available on the internet that can easily be found that allow users to access anywhere. And of course this will make it easier for teachers to create interesting teaching materials that students like.

Based on all the problems that occur on the importance of digital literacy for student teachers, it is necessary to conduct research on "Investigating Pre-service Teacher Digital Literacy in Using learning Application". This research uses

descriptive qualitative research with data collection techniques using survey methods to determine the perceptions of Pre-service Teacher. Survey is used to investigate the status of phenomena that are happening. Descriptive surveys are divided into three types, namely (1) Survey testing method; (2) Questionnaire survey method; and (3) Interview survey method (Singh, 2006, p. 101). In this study, researchers used questionnaire survey method and interview survey method.

1.3 Urgency of the Study

Given that today's students are digital natives who prioritize digital technology in any condition. So in the world of education, especially a teacher, must have the knowledge and ability to operate digital technology in order to realize the era of society 5.0. To get teachers who have digital literacy, it must start from pre-service teachers. Pre-service teachers must be trained in digital literacy competencies, one of which is by utilizing learning applications.

1.4 Research Question and Research Objectives

a. Research Question

Based on the background of the problems described above, this research will focus on:

1. How do pre-service teachers acquire digital literacy in using learning applications?
2. How the pre-service teacher readiness in applying learning application in teaching practice?

b. Research Objectives

This study is aimed at :

1. Finding out how PST acquire digital literacy in using learning applications.
3. How PST readiness is in applying learning application in teaching practice.