

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

The 21<sup>st</sup> century skills are abilities that need to be possessed in this era. These skills are important as to help students compete with today's modern markets. The 12 skills of 21<sup>st</sup> century skills are divided into three categories which are learning skills, literacy skills, and life skills. The 21<sup>st</sup> century learning consist of 4 competencies that are essential for modern students to prepare them for the future. They are critical thinking, communication, collaboration, and creativity. While the other category of 21<sup>st</sup> century skills are the literacy skills which consist of information literacy, media literacy, and technology literacy. These digital literacy skills are needed to be mastered in order to be successful in this era. As stated by Rhedana (2019) digital literacy skill is important to have in order to be succeed in facing the challenges, life problems, and careers of the 21<sup>st</sup> century.

In the field of language education, studies have shown that technology has a big role in developing students' language proficiency, autonomy, and motivation. Many studies have also shown the benefits of digital technologies that can improve students' English proficiency through creating effective learning via social networks application, and can increasing students' learning motivation. As according to Levin and Wadmany (2006) the integration of ICT in teaching has powerful roles in educational field to enhance teaching and learning quality. ICT has positive effect on students' enjoyment and interest in learning. ICT applied in teaching-learning process will engage students in learning.

Technology is not only helpful in classroom teaching and learning but it also provides opportunities for students self-learning the language outside. There are many programs, websites, CDs, videos, lecturers, and books that have been designed for learning English as a foreign language in this modern era. Web technology serves EFL learners and teacher have free access to many of these knowledgeable programs which supports them in developing their language and also create more effective learning and teaching.

Digital literacy has been familiar issues for research since the fourth industrial revolution era was born with the rapid advancement of digital technology and ICT. According to UNESCO (2018), Digital literacy is the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship. It includes competences that are variously referred to as computer literacy, ICT literacy, information literacy and media literacy. Some features of Digital Literacy are accessing information, managing information, evaluating information, integration, creation of new knowledge, and communication. (UNESCO, 2011). According to Gilster (1997) digital literacy is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. There are several elements of digital literacy such as critical thinking skills, creativity, constructing and evaluating information, and using digital effectively. (Al-Qallaf, Al Muttairi 2016).

Some competencies in digital literacy that need to be possessed include; information and data literacy, means able to browse, search, filter, evaluate and managing data, information, and digital content. Communication and

collaboration, means able to interact, share, engage in citizenship, and collaborate through digital technologies, netiquette, and managing digital identity. Digital content creation, means able to develop, integrate, and re-elaborating digital content, copyright and licenses, programming. Safety, means able to protect devices, personal data, privacy, health, well-being, and the environment. Problem solving, means able to solve technical problems, identify needs and technological responses, creatively using digital technologies, and identify digital competence gaps (UNESCO, 2018). Six core skills in one essential components of digital literacy including; collaboration, creativity, critical thinking, citizenship, character, and communication. The last category of 21<sup>st</sup> century skills is life skills, which consist of flexibility, leadership, initiative, productivity and social skills.

Teachers in the IR 4.0 era are expected to have high digital literacy skill in order to fulfil the needs of this millennial generation in the classroom. As the generation in this era has been used to live and grow with various digital technologies invention and keep in touch with digital technologies. Therefore, teachers are required to integrate digital technology into English teaching and learning process. Teachers with high digital literacy skill make a better quality of English teaching and learning. Teacher is also required being skillful in utilizing and integrating ICT in teaching and learning activities in classroom to prepare students for this current digital era and to enhance the students' knowledge and competences. As according to The Ministry of National Education Regulation PERMENDIKNAS No.16 2007 in Indonesia, teachers are required to be able to use ICT, therefore studies regarding teachers' digital literacy need to be conducted

to collect information to what extent teachers have already equipped themselves with digital literacy skill to fulfill the requirement.

According to The Republic of Indonesia Law Number 14 of 2005 on Teachers and Lecturers stated that teachers and lecturers are required to own four main competencies namely professional competence, social competence, personal competence, and pedagogical competence. One of the importance of owning such kinds of competencies is noted by other countries and reputable teachers' associations. In Western Australia, competency standards for teachers are facilitating student learning, assessing student learning outcomes, engaging student in professional learning, participating to curriculum and program initiatives in outcome focused environment, forming partnership within the school community. ForeignLanguage Teachers standards in the European Profiling Grid or EPG are competencies in language proficiency, Education Training, Assessed Teaching, Teaching experience, Methodology: knowledge and skills, Assessment, Lesson and Course Planning, Interaction management and monitoring, Intercultural competence, Language awareness, Digital Media, Professional Conduct and Administration.

Because of the rapid advancement of ICT, the requirements to have digital competence in the workplace is needed. Employers hire everyone that has digital literacy as their workforce. In social aspect, having competency in digital technology is also needed and demanded. Digital literacy skill keeps us more connected with others and gain more information and many knowledges.

ICT as a tool in helping students in learning a language. There are some companies in the field of education in Indonesia that use ICT to support students in

learning such as Zenius, Ruang Guru, Quipper, etc. In this era of 21<sup>st</sup> century, teachers and learners should be digital literate.

ICT knowledge and skills possessed by teachers can be seen through the application and activities that teacher master such as file navigation, email, internet, word processing, presentation packages, and spreadsheets. According to UNESCO, ICT competency is competency for teachers in utilizing ICT in order to prepare students to be able to master new technology as preparation for them in developing themselves as long life learner. According to UNESCO, ICT competencies that are needed for teacher in order to integrate information and communication technologies (ICTs) into their professional practice, consist of 18 competencies and categorized into six aspects. The six aspects including; understanding ICT in education, curriculum and assessment, pedagogy, application of digital skills, organization and administration, and teacher professional learning. These competencies are needed for teachers as they play very important role in teacher professional development.

There are also three stages of ICT regulation for the development in using ICT pedagogically. The first level is Technology literacy or knowledge acquisition, aims to enable teachers to support students of different abilities, ages, gender, and socio-cultural and linguistic backgrounds, to use ICT to be effective learners and productive members of society. The second level is knowledge deepening, aims to increase the ability of teachers to support students of different abilities, ages, genders, and socio-cultural and linguistic backgrounds, to apply knowledge to solve complex, high-priority problems encountered in real- world situations of work, society and everyday life. The pedagogy associated with this

level include collaborative problem-solving activities and project-based learning in which students explore a subject deeply, and bring their knowledge to bear on complex, everyday questions, issues, and problems. The third level is knowledge creation, the goal is to enable teachers engage in, and benefit from, knowledge creation, innovation, and life-long learning. (UNESCO, 2018)

ICT competency standards for pre-service teacher in Philippines include six domains. They are understanding ICT in policies, curriculum and assessment, pedagogy, technology tools, organization and administration, teacher professional learning and teacher disposition.

The rapid advancement of technology requires teachers to be able to use technology or to be digital literate. Teachers with lack of digital literacy skill could hinder the effectiveness of the use of Information and Communication Technology (ICT) in schools. If the teacher has difficulty in digital literacy, it would interfere the effectiveness of teaching learning process in this era of digitalization. (Akbar & Anggraeni, 2017). Teachers with good quality in digital literacy will optimize students' learning result in class. (Giovanni, 2019). Discovering the actual English teacher's digital literacy profile and which part they lack on can be the first step to develop their digital literacy.

Regarding to this background, several studies which focused on teachers' digital literacy competency. Hana lestari, et all conducted a study about Digital Literacy Skills of Teachers in Elementary School in the city of Bogor. The method used in data collection in this study was using a questionnaire as the main source and was supported by interviews directly with respondents The results of this study indicate the level of digital literacy among elementary schools' teachers

in the city of Bogor is already middle in all aspects of competence, both on internet searching aspects, hypertextual navigation aspects, content evaluation aspects, and knowledge assembly aspect. In Nepal, Mohan Singh Saud (2021) conducted a study sought to survey the digital literacy skills of secondary school level English teachers of Nepal to check their preparedness for online delivery. The instrument is using questionnaire. Data was collected using the snowball-sampling method. This study found that secondary school-level English teachers possess the necessary digital literacy skills like word processing, the use of the Internet, downloading, online presentations, and hence, are prepared for an online teaching mode.

#### Problem Statement

1. Nowadays, it is very important for teachers to have digital literacy skill to fulfil the needs of the education in the era of 21<sup>st</sup> century, so teachers need to develop their digital literacy skill. Therefore, this study aimed to find out and describe the actual digital literacy profile of Vocational High School English teachers.

#### 1.2 Research Questions:

Based on the identified problem above, this study aimed at finding answer to the following questions:

1. How is the digital literacy profile of English teachers in Budi Murni 3 Vocational High School? (a). what digital literacies have the teachers occupied? (b.) Which digital literacies have the teachers incorporated in the teaching program?

### 1.3 Purposes of the Study

The purpose of this study is

1. a. To find out and describe digital literacies that the teachers have occupied
- b. To identify and describe digital literacies that the teachers have incorporated in the teaching program

### 1.4 Scope of the Study

This study focuses on the digital literacy of the English teachers in the school being studied in the case. This study also focuses on the digital literacy recognized, understood and used by the English teachers in the school case which have been identified from the teaching and learning documents and implementation and informed by the teachers during the interview.

### 1.5 Significance of the Study

The result of the study will signify to:

1. Theoretical contribution

This study related to the identification and the elaboration of competencies in digital literacy can be used to enrich knowledge about digital literacy for English teachers in Indonesia.

2. Practical contribution for the teacher

The findings of this study give overview and reflections about digital literacy skills of the English teachers so that it can make easier for them to improve and develop themselves for better teaching performance from the previous one.