CHAPTER I
INTRODUCTION

1.1 Background of Study

The advancement of information and communication technology (ICT) has been very rapid in the last ten years. It has become an inseparable part in both work and leisure activities. ICT enables people to have access on constantly updated worldwide information and fast borderless connectivity around the world. In addition, economic growth is one of the results of the development of ICT, given that it empower new businesses and job opportunities (Laar, Deursen, Dijk, & Haan, 2020). With the advancement of technology, the needs of workforce that have digital competence will be increased, as employers seek digital literacy in almost everyone they hire (Gupta & Ndahi, 2002). Vocational school as the educational and work training institute has a big role in producing skillful and digitally literate workforce.

Vocational Schools (SMK) as one of the secondary education levels that prepare workforce must focus on improving the quality of human resources. Indonesia will have the peak of demographic bonus at 2030-2040 in which the productive age population is more than the non-productive population (Khurniawan & Erda, 2019). It can be a good potential if Indonesia prepare on improving the education quality of its younger generation. Indonesian government has realized that vocational school plays big role on improving the quality of human resources by issued Presidential Instruction No.9/2016 on the revitalization of vocational high school. Vocational school in Indonesia is now preparing its students to have knowledge combination, technical and social skill, positive behavior and digital competence to adapt in rapidly changing industry and society (Direktorat Pembinaan Sekolah Menengah Kejuruan (DitPSMK), 2019). Vocational school also focus on improving its students' digital literacy, as in the future, to be specific at 2030, there will be more 'work from home' situation utilizing the advancement of technology (UKCES, 2014).

Digital literacy is defined as “the ability to understand and use information in multiple formats” with emphasis on critical thinking rather than information and communication technology skills (Gilster, 1997). In current usage, digital literacy often refers to a set of skills that allow the user to run software or application effectively, or doing basic information browsing on the internet (Buckingham, 2015). Digital literacy also means a set of distinct abilities or behaviors expressed by the internet user when finding information on the internet (Meyers, Erickson, & Small, 2013). There are several elements of digital literacy, such as critical thinking skills, creativity, constructing and evaluating information and using digital media effectively (Al-Qallaf & Al-Mutairi, 2016). From those experts’ definition, the concept of digital literacy or digital competence often refers to the analytical skill when browsing information on the internet and the skill of utilizing digital tools.

Discovering students’ digital literacy profile and which part they lack on can be a starting point to develop their digital literacy. Assessment tool can be utilized to profile students’ digital competence and to plan lesson that suit students’ needs (Calvani, Fini, Ranieri, & Picci, 2012). Current study shows diversity in digital competence between students (Ashari & Idris, 2019; Jordana & Suwarto, 2017; Kurnia & Astuti, 2017; Perdana, Yani, Jumadi, & Rosana, 2019). There are many study on digital literacy in vocational school in a micro scale, for example a study on improving vocational school students’ digital literacy through blended learning (Patmanthara & Hidayat, 2018), a study on developing learning material using google classroom in vocational school (Numertayasa, 2018), study on constructing web-based E-Learning in vocational school (Kosasi, 2015). However, there have not been study on profiling vocational school students’ digital literacy in a large scale. Therefore, this study aims at establishing a profile of Jakarta Vocational School students’ digital literacy with reference to UNESCO’s Digital Literacy Global Framework (Law, Woo, de la Torre, & Wong, 2018)

1.2 Research Question

How is digital literacy profile of vocational school students in Jakarta?:

a) How is digital literacy profile of vocational school students in Jakarta in terms of device and software operation?
b) How is digital literacy profile of vocational school students in Jakarta in terms of information and data literacy?
c) How is digital literacy profile of vocational school students in Jakarta in terms of communication and collaboration?
d) How is digital literacy profile of vocational school students in Jakarta in terms of digital content creation?
e) How is digital literacy profile of vocational school students in Jakarta in terms of safety?
f) How is digital literacy profile of vocational school students in Jakarta in terms of problem-solving?
g) How is digital literacy profile of vocational school students in Jakarta in terms of career-related competences?

1.3 Purpose of Study

The purpose of this study is to describe the digital literacy profile of vocational school students in Jakarta with reference to UNESCO's Digital Literacy Global Framework (Law et al., 2018) which cover device and software operations, information and data literacy, communication and collaboration, digital content creation, safety, problem-solving, and career-related competences.

1.4 Scope of Study

This study focuses on digital literacy profile in terms of device and software operations, information and data literacy, communication and collaboration, digital content creation, safety, problem solving, and career-related competences (Law et al., 2018).

1.5 Significance of Study

Theoretically, the findings of this study will benefit the directorate of vocational school and vocational school to develop digital literacy curriculum and

digital literacy assessment for improving digital literacy skills of vocational school students.

Practically, the findings of this study can give insight for the teachers to understand their students' digital literacy and benefit them for improving instructional activities.