Online Learning in disadvantaged areas. A Literature review

Ahmad Budidarma
Direktorat Guru Pendidikan Menengah dan Pendidikan Khusus
Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, Indonesia
Email: Budidarma127@gmail.com

ABSTRACT

The use of technology in the era of the 4.0 technology revolution is inevitable. Even in remote areas, it is not spared in utilizing learning using technology. However, there are network constraints that limit educators and students in the learning process to form online communication. The solution expected for online learning is that the teacher prepares all forms of learning media that are ready to be studied by students, whenever and wherever they are. So that when there is an internet network students are able to learn the learning media delivered by the teacher.

Keywords: *Educators; Online Learning; 3T; Learning Media*

INTRODUCTION

The era of the Technological Revolution 4.0 can be realized that it is marked by a variety of digitalization that is increasingly dense and requires people to be able to develop, one of which is technological development (Dev et al., 2020; Mubarak & Petraite, 2020; Neumann et al., 2021). To excel in advancing the digitalization era, the presence of teachers is very important to be digitally literate (Aljaber, 2018; Farhan et al., 2019; Jabbar et al., 2016; Muangmee et al., 2021; Nakajima & Goode, 2019; Sukendro et al., 2020). If teachers do not master technology, are not creative and innovative, then it is not impossible in the era of the increasing industrial revolution, teachers will be replaced by technology (Aljaber, 2018; Bierly et al., 2000; Farhan et al., 2019; Jabbar et al., 2016; Kumar & Toteja, 2012; Lau et al., 2018; Muangmee et al., 2021; Nakajima & Goode, 2019; Novos, 1992; Sukendro et al., 2020).

But what about underdeveloped, frontier and outermost (3T) areas that are not even touched by technological advances? Not to mention the lack of Human Resources both in terms of educators and students. Moreover, when we talk about internet access, there are even some 3T areas that don't even have internet, electricity has not yet entered their area. readiness of educators or teachers in special areas and 21st century skills that must be mastered by teachers, as well as classifying factors of condition/geographical area, teacher's income/salary, length of service, gender, and their age into the variables that affect the placement of the teacher in the area special.

Digital Learning

Understanding digital learning according to the American Society of Training and Education (ASTD) is a process in which students use digital media in learning (Lin et al., 2017). The digital media in question include the internet, networks, computers, satellite broadcasting, audio and video recordings, interactive TV, and compact disks (CDs). These uses include

network-based learning, computer-based learning, virtual classes, and digital cooperation (Aljaber, 2018; Galea & Stewart, 2007; Jayawardena et al., 2019; Konting, 2012). ; Lau et al., 2018; Ngabiyanto, 2020; Sua et al., 2013).

Furthermore, research conducted by Lin, Chen, & Liu on 116 students spread across 4 classes shows that digital learning has a positive impact on learning motivation and learning achievement compared to traditional learning. In addition, learning motivation shows a significant positive impact on learning achievement and learning outcomes. The results of this study are expected to be the basis for combining traditional learning with digital learning, especially in terms of developing learning strategies so as to support learning effectiveness (Lin et al., 2017).

Use of Technology in Learning

The use of technology certainly has positive and negative impacts, especially when viewed from the level of need for the results of these technologies (Chong et al., 2016; Muangmee et al., 2021; Nakajima & Goode, 2019; Sukendro et al., 2020; Wihlborg et al. ., 2018). This is explained by Ferdig, who says that it is difficult to determine the importance of a technology beyond the purpose for which the technology was created (Ferdig, 2006). For example, a screwdriver is a good innovation in some cases, but has the potential to become unimportant when people need a hammer more. In addition, the value of a technology should also be seen from the pedagogical side.

The use of technology in learning can be successful if it is supported by the quality of teacher education. Quality education requires complex knowledge and skills, so media literacy is needed as a framework that can measure these knowledge and skills to prepare 21st century teachers (Domine, 2011). On the other hand, McKnight said that the success of using digital media in the classroom is not determined by technology, but by how the technology enables the teaching and learning process to occur (McKnight et al., 2016). In terms of the relationship between self-efficacy and self-regulated learning, a study conducted by Tantrarungroj on teachers found that pre-service teachers who are experienced in online-based learning with various types of SRL strategies, have a significantly higher test score for self-efficacy. in terms of designing digital media when compared with their pre-test results (Tantrarungroj & Suwannatthachote, 2012).

Furthermore, in terms of the professional abilities of teachers, the programs developed should be able to assess the motivation of teachers to participate in online learning and be able to build learning experiences that can develop based on what teachers believe and use the concepts/themes that are most important to them (Hobbs & Tuzel, 2017).
Furthermore, the motivation of teachers when joining online communities and the use of technology should be distinguished, because online communities are generally divided into fields or hobbies that they are interested in. The online community between people who have a hobby of automotive, plants, and others is certainly different from professional communities such as teachers (Harasim, 2017).

CONCLUSION

Online learning is able to provide convenience to educators and students. This is due to the formation of online communication between the two parties. The solution in learning is of course the learning media prepared by the teacher to be studied by students connected to online

communication. So that students are able to learn the learning media delivered by the teacher. Of course, the internet network becomes an obstacle for learning. However, any network problems can be communicated to each other.

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