


Chapter 4

Bridging the Digital Divide in the Access and Usage of Technology Through Digital Literacy in Rural Vocational Schools

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ABSTRACT

The digital divide phenomenon presents a significant challenge in rural vocational schools, where disparities in access to and utilisation of technology can hinder educational opportunities for marginalised individuals. Despite the extensive body of research on the integration of digital technologies in academic settings, there remains a notable deficiency in understanding effective digital literacy practices tailored specifically for vocational education. This study employs resource and appropriation theory to explore the inequalities in technological access and usage within vocational institutions. The investigation identifies four distinct types of digital divides: the physical access divide, the skills access divide, the usage divide, and the network or internet divide. The findings suggest that bridging the digital divide necessitates a collaborative approach involving four critical stakeholders: vocational institutions, industry partners, government agencies, and rural communities, thereby fostering an inclusive environment.

DOI: 10.4018/979-8-3373-0004-7.ch004

1. INTRODUCTION

Ocaña-Fernández, Fernández, Chiparra, Gallarday-Morales and Gallarday-Morales (2020) contend that the relentless progression of technology has undeniably led to rapid transformations, significantly impacting various facets of human life, particularly in education. Likewise, Afzal, Khan, Daud, Ahmad and Butt (2023) comment that contemporary society increasingly demands information skills across various domains, encompassing everyday life, professional environments, educational institutions, and higher learning establishments. Peñate, Padrón-Robaina and Nieves (2024) add that the increasing trend of digitalisation in contemporary society and the rising need for digital skills necessitate educational systems to evolve in response to these developments. Devisakti and Muftahu (2023) and Balderas-Mireles et al. (2021) complement in a landscape marked by swift and ongoing transformations, leveraging technological tools is essential for enhancing the effectiveness of teaching and learning methodologies in educational training. In contemporary society, digital technology plays a crucial role as a medium for communication, entertainment, information dissemination, and education (Habibi, Sofyan & Mukminin, 2023). Consequently, the responsibilities of educators and other professionals have evolved markedly, as the array of teaching and learning resources has expanded, facilitating education within an increasingly interconnected global community (Ocaña-Fernández et al., 2020). Habibi et al. (2023) assert that in contemporary society, digital technology plays a crucial role as a medium for communication, entertainment, information dissemination, and education. However, a digital divide means that access to technology is not uniform across the population (Habibi et al., 2023). The digital divide refers to the disparity between individuals with access to technology and the skills to utilise it effectively and those without such access (Afzal et al., 2023). Moreover, Van Dijk (2019) states that the digital divide is a technical issue when, in fact, it is more of a social problem. This divide highlights the disparities between individuals who have access to technological resources and those who lack them, thereby exacerbating existing inequalities in financial, informational, social, and educational domains (Habibi et al., 2023). Duma et al. (2021) explain that information communication and technology (ICT) encompassing the internet, computers, and mobile devices like smartphones, tablets, and laptops, are utilised in educational settings to enhance teaching and learning resources. Afzal et al. (2023) note that the ability to access these devices and the internet, along with the skills to utilise these technologies effectively, is becoming essential for comprehensive engagement in economic, political, and social spheres. The authors add that access to digital technologies is crucial for promoting equitable participation in the information economy, facilitating governments in meeting their electronic service delivery goals, and empowering individuals to seize the economic growth opportu-

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