Editorial

Mobile learning during the era of COVID-19
Aprendizaje móvil durante la era de COVID-19

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A novel coronavirus (COVID-19) has been identified in Wuhan, China, in late 2019 (Zhu et al., 2020). On March 11, 2020, the World Health Organization (WHO) has declared the outbreak of COVID-19 as a global pandemic (Cucinotta & Vanelli, 2020). In responding to this pandemic, a series of precautionary measures have been taken forward on a global basis to combat the spread of the virus. One of such measures was the lockdown of educational institutions. To compromise between the delivery of learning to students and committing to social distancing, the transition to distance learning was the unavoidable option in such crises.

The magnanimity of information and communication technologies impact on various sectors cannot be denied, specifically in the education domain. These flourishing technologies have taken a headway to provide a practical solution for decision-makers and instructors in delivering the learning material and facilitating the assessments amid the COVID-19 quarantine period. To facilitate this process, universities and colleges have employed a number of technologies, including learning management systems (e.g., Moodle, Blackboard), virtual meeting platforms (e.g., Zoom, Microsoft teams, Google Meet), and other educational portals.

One of the pioneering technologies that played a significant role during this pandemic is mobile learning (m-learning). M-learning refers to the learning that is involved with the mobility of student where s/he can be engaged in the learning process at "anytime anywhere" settings using mobile devices (Kukulska-Hulme, 2007). While there are several ways to access the learning materials during the quarantine period, including desktop computers and laptops, most of the students prefer to use their mobile devices as alternatives. This stems from the ubiquitous functionality of mobile devices where students can access their learning material without any restrictions to time and location. M-learning enables students to develop their conversational and technical skills, find answers to their queries, facilitate knowledge sharing and collaboration, and enhance their learning outcomes. Educators can also personalize their teaching instructions through m-learning and enable learners to self-regulate their learning.

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EDITORIAL

The employment of m-learning during the era of COVID-19 brings various opportunities and challenges for both practice and research. For practice, since the quarantine period and social distancing are unpredictable so far across several universities and colleges, the selection of m-learning can be one of the practical solutions to pursue the educational process in a digital and fashionable way. The emergence of COVID-19 has shaped a new type of learning that is called "digital learning", which can be approached through e-learning and m-learning technologies. Within and beyond the era of COVID-19, educational institutions might consider the m-learning as an effective approach for digital learning during the current and future crises. The COVID-19 pandemic might not be the last crisis to challenge educational institutions stakeholders. Hence, the preparation for m-learning infrastructure would be the key to handle future global risks.

Despite the tremendous advantages and opportunities, the use of m-learning also imposed several challenges. Internet connectivity, lack of instructors-student's interaction, students' and instructors' readiness, and social isolation are among the main challenges for using m-learning and other distance learning technologies. Besides, the use of these technologies within the absence of educators could lead to many cheating cases, which undoubtedly, would affect the students' learning outcomes and deter the quality of education.

While several studies indicated the employment of m-learning in the past (Al-Emran et al., 2020), it can be argued that most of those studies were empirical in nature and didn't experience the actual use of m-learning in a longitudinal period. In a sense, m-learning was not considered as a part of formal learning across several institutions until the outbreak of COVID-19. Thus, for research, it can be argued that the factors affecting its actual use in the past might be different from the factors influencing its employment during the outbreak of COVID-19. Before stating that "m-learning is a useful tool for learning", it is encouraged to re-examine the determinants affecting the actual use of m-learning during and beyond the era of COVID-19 with a special focus on quality factors to understand how the material quality would influence the students' decisions to adopt m-learning in future crises. The full understanding of those determinants might help in shaping new trends of learning in the future that can be fully based on digital and smart mobile technologies.

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