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Mobile Learning in Developing Countries: A Synthesis of the Past to Define the Future

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Abstract: Mobile learning (m-learning) is a novel approach to knowledge acquisition and dissemination and is gaining global attention. Steady progress in wireless technologies and the portability of communication devices continue to broaden the scope and use of mobiles. With the convergence of Web functionality onto mobile platforms and the affordability and availability of mobile technology, m-learning has the potential of being the next prevalent channel of education in both formal and informal settings. There is substantive literature on developed countries but the state in developing countries (DCs) however appears vague. This paper is a synthesis of extant literature on mobile learning in DCs. The research interest is based on the fact that in DCs, mobile communication and internet connectivity are popular. However, its use in education is under explored. There are some reviews on the state, conceptualizations, trends and teacher education, but to the authors' knowledge, no study has focused on mobile learning adoption and integration issues. This study examines issues and gaps associated with its adoption and integration in DCs higher education institutions. A qualitative build-up of literature was conducted using articles pooled from electronic databases (Google Scholar and ERIC). To enable criteria for inclusion and incorporate diverse study perspectives, search terms used were m-learning, DCs, higher education institutions, challenges, benefits, impact, gaps and issues. The synthesis revealed that though mobile technology has diffused globally, its pedagogical pursuit in DCs remains quite low. The absence of a mobile Web and the difficulty of resource conversion into mobile format due to lack of funding and technical competence is a stumbling block. Again, the lack of established design and implementation rules to guide the development of m-learning platforms in DCs is a hindrance. The absence of access restrictions on devices poses security threats to institutional systems. Negative perceptions that devices are taking over faculty roles lead to resistance in some situations. Resistance to change can be a hindrance to the acceptance and success of new systems. Lack of interest for mlearning is also attributed to lower technological literacy levels of the underprivileged masses. Scholarly works on m-learning in DCs is yet to mature. Most technological innovations are handed down from developed countries, and this constantly creates a lag for DCs. Lack of theoretical grounding was also identified which reduces the objectivity of study reports. The sociocultural terrain of DCs results in societies with different views and needs that have been identified as a hindrance to research. Institutional commitment decisions, adequate funding for the necessary infrastructural development as well as multiple stakeholder participation is important for project success. Evidence suggests that while adoption decisions are readily made, successful integration of the concept for its full benefits to be realized is often neglected. Recommendations to findings were made to provide possible remedies to identified issues.

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