Chapter 29 Mobile Apps in Open Educational Resources

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ABSTRACT

Globally, those who have traditionally been adversely impacted by the digital divide due to lack of access to computing technologies such as desktop computers, are also the ones who have been shown to have high adoption of mobile devices. If open educational resources (OER) are to have the envisaged wide impact, it is necessary to look at the role mobile applications and mobile app markets play in the OER movement. In this chapter, we link mobile applications and OER and discuss the role mobile app markets play in facilitating open-access learning initiatives. This is done by exploring OER and mobile learning definitions, benefits, and barriers; and comparing and contrasting mobile apps across a set of variables including purpose and resource format.

INTRODUCTION

The confluence of mobile apps and open educational resources (OER) seems natural, but it is rarely discussed. Mobile apps enable mobile devices such as tablets and phones to function. It has become nearly impossible to use any function of a mobile device without a mobile app that has been downloaded from a mobile store or market. Whether it is surfing the web, playing a game, looking up health information, participating in learning activities, or watching videos on a mobile device, it is likely being done through mobile apps.

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Mobile apps provide easy access to educational learning that may at one time have only been available through physical libraries at educational institutions, thus leaving many unable to access information and making learning available to only a few. For example, it is now possible to connect to the internet regardless of where an individual is located as long as the phone has a capacity for a web connection and said connection is supported or available. Even if an individual does not have a smartphone or a tablet device, web browsers designed specifically for low-end phones can enable one to search for information.

Mobile apps enable users to connect to educational resources. One such example is Browzine created by Third Iron, a company known for developing library technologies (Bickett, 2014). Launched in 2011, the app is available free for download on mobile phones, iOS and Android tablets, and Kindle devices. Once downloaded, the user signs into his or her associated library and is able to browse numerous journals available in the library. In other words, instead of having to go to the library to browse through a stack of resources or logging onto the internet to search for journals, a user can easily access hundreds of journals through the ease and comfort of their mobile devices. Other similar mobile apps are listed in Table 1.

Ease of access to learning materials is the natural linkage between OER and mobile apps. Open educational resources (OER) are often seen as a way to decentralize and disrupt the educational complex. In today's education system, only those with adequate finances can afford to attend the top tier schools and learn from the best scholars and can afford to purchase required textbooks that are prohibitively expensive. In this scenario, knowledge is controlled by gatekeepers who ask for, at times, an impossible admission fee.

In this chapter, we aim to explore the relationship between mobile apps and open educational resources. Our main guiding question is: how can OER be sustainable if mobile apps and mobile apps markets are themselves not open? This chapter is organized in the following manner: First, we present our understanding of OER, its benefits and some of the barriers. Second, we explore mobile learning. Third, we present our main argument that OER and mLearning cannot go together based on the current structure of the mobile markets. We end the chapter with discussions of solutions and recommendations.

Table 1. Library access applications

Product	Company	Description
EBSCOhost	EBSCO Publishing - https://www.ebscohost.com/	Allows users to search for and read articles on a variety of topics, such as history, economics, environmental science, etc. After downloading the app, the user can connect to their institution's library.
WorldCat Mobile	WorldCat - https://www.worldcat.org/ mobile/	Allows users to search for and request books from library with which the user is affiliated as well as libraries from around the world.
Pubget	Pubget, Inc http://pubget.com/	Pubget allows iPad users to receive full-text journal articles. Articles can be read as PDFs and also can be saved on the device.
WolframAlpha	Wolfram Research - http://www.wolfram.	Allows users to search for scientific information that may be difficult to find on traditional search engines.

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