Chapter 7
Current Situation and Appraisal
Tendencies of M–Learning

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ABSTRACT

Mobile devices and apps are placed in a prominent position in the daily routine of all people. The fast evolution of these devices and their main advantages have caused a real impact in the society. Currently, they are essential tools to be totally connected anywhere and to consult and access information of any field. The use of these devices has been increasing since the last decade. The emergence of new and sophisticated devices and new services has contributed to this sparkling uptrend. One of the fields that society is using these mobile technologies is in learning. The aim of this chapter is to describe the current situation of these technologies and to make an approach of the future tendencies of these tools. To achieve this goal, it was necessary to conduct a survey and involve different undergraduate students of the university and different professionals. Results reveal that students are using more and more apps and mobile devices but there is an important gap between students and professionals so it is still necessary to boost their relevance to improve their potential use.

INTRODUCTION

Currently, there are 51,298 million of mobile lines in Spain (CNMC, 2017). Step by step, people have got used to these devices, which have provided new ways of communication, interacting each other, getting information or even learning.

The number of these lines has been increasing dramatically since the last decade. Not only that, this trend has sparked the appearance of mobile devices more sophisticated as Smartphone and tablets where

DOI: 10.4018/978-1-5225-4944-4.ch007
it is possible to run mobile applications or apps on them. In fact, according to the study conducted by Fundación Telefónica (Fundación Telefónica, 2017), there is roughly 27.7 million of active users and 3.8 million of daily downloads in Spain. Smartphones have, on average, 30 apps installed on it per user, whereas tablets have around 24 apps.

These apps can be found in the marketplace, available since different mobile devices. In fact, according the reports, there are currently almost 3 million of apps in Google Play (Statista, 2017a) and more than two million in App Store (Statista, 2017b).

On the other hand, there is a study conducted by Educause Center for Applied Research (ECAR) (Eden Dahlstrom, 2012) that has published an article about the use of mobile technology in higher education. One of the results claimed that around 67% of surveyed students reported that mobile devices are very important in their academic success and their activities in the University. In fact, one of the upward trends of the last years is precisely the application of new technologies within the educational context and specifically of mobile devices and its educational use, which is known as mobile learning. Therefore, higher education and consequently and specifically, medical education, are highly impacted by this trend.

There are many reports related with the use of mobile devices (Mobile Marketing Association, 2017; Nielsen, 2014; The State of Mobile World 2014, 2014) in general and the use of students in particular (Eden Dahlstrom, 2012). One of the reports (Fundación Telefónica, 2014) affirmed that around 90% of medical professionals has accessed Internet during 2013 and 51% of them has used Smartphones to access medical information. Recently, it has published another report that reveals that 29.9% of Internet users have used them for training courses (Fundación Telefónica, 2017). Besides, the percentage of Internet users from 14 to 19 years old, that have chosen education as first reason to use Internet, has been increased in 8 percentage points.

The use of mobile devices and its inclusion as learning tools in the classrooms of Medical Schools is becoming a reality. Some Schools, as the Medical School of University of Stanford have already adopted the new technologies (mainly tablets) for leaning, forcing their use providing one of them to all undergraduate students (Dolan, 2011; Gallegos, 2013).

Students want to be more and more prepared for the work, so University and Medical Schools must adopt the cutting-edge technologies for providing the students the best education and allow them to be part of the new digital era. Because of that, they must solve some pitfalls in order to modify their curriculum. It is important to notice that the Medical Schools that have implanted these devices, they are still using them (Briz-Ponce, Juanes-Méndez, & García-Peñalvo, 2014b).

However, in spite of these advantages, the use of medical apps for medical education is still limited or unknown. This paper wants to analyse these benefits and the behaviour of a specific group such as students and medical professionals. Besides, it wants to provide some insights about the main factors to consider when it is necessary to promote the use of apps in an academic environment. This outreach includes an up-to-date of different participants’ characteristics and how they could influence on the use of mobile devices for learning. It is important to notice that this paper also tries to analysis the relationships between these characteristics and how they may have an effect on the participants’ behaviour. Most part of them were analysed previously (Briz-Ponce & Juanes-Méndez, 2015) but this paper completes the information and also includes some current tendencies in the field of m-learning.

The study is divided in four sections. The first section describes the methodology used to perform the survey in the University of Salamanca and provides a review of the main characteristics of the participants’ profile. The second section explains the results obtained focusing on the main uses of mobile