

## Chapter 32

# Learning Goes Mobile: Devices and APPS for the Practice of Contents at Tertiary Level

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### ABSTRACT

*Nowadays, mobile learning allows the use of mobile devices in teaching and learning practices of almost any subject or topic of interest. In this chapter, we describe a research carried out to get data about the use that university students make of mobile devices and apps for learning purposes, as most of them use mobile phones and tablets as communication and entertainment tools, but don't get benefit from these devices as educational resources, either due to lack of knowledge or to the scarce information about the pedagogical uses of these devices. The methodology followed is based on an analysis of the results obtained from questionnaires implemented to students. From the data collected, we draw a number of conclusions relevant not only to the successful development research studies like this, but also for the implementation of teaching initiatives including mobile devices and applications for improving learning processes in general.*

### 1. INTRODUCTION

Our society is nowadays suffering important changes at all levels, which are, to a great extent, affecting our lives and, especially, our way to learn and communicate. The vast quantity of information together with the high influence of the mass media at a global scale is generating substantial transformations that range from changes in global paradigms at a social, economic and cultural order, to new habits in our everyday life, voiced through the way we dress, act, and even through how we interact and relate with others. The youth of today, Digital Natives, have grown up with the Internet and social media. This new

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generation has radically changed, they live most of their lives online and have a tendency to multitask and express themselves by creating new information and art forms (Prensky 2001; Palfrey & Gasser 2008).

In the last decades, the use of mobile devices has suffered a notable increase in all areas of human life, assuming a more and more relevant role in society and generating a dominant need for people, teaching-learning, formation and training processes carried out throughout our lives, and which are so necessary for the correct development, acquisition and application of personal, familiar, social, academic, professional, economical and cultural competences. As Katz (2008) explains it: “there are some remarkably consistent changes in personal routines and social organization as a result of literally putting mobile communication resources into the hands of people” (p. 3).

As Katz, Lever and Yi-Fan (2008) put it, although they were formerly technologies of personal isolation, mobile devices seem destined to be expanded into technologies of conviviality, and thus these new media technologies have made physical boundaries more permeable and have also transgressed the boundaries of private and public life (Meyrowitz 1985; Morley 2000; Nikunen 2010).

Teaching has always been bound together with information transmission processes, as well as with the mere reception of knowledge, as if it was a simple process, forgetting that the learning process entails bearing in mind the different dimensions that make it possible. According to Fernández Huerta (1985) those dimensions are: a human being who teaches, a human being who is taught (addressee of the learning process), an object being taught (content or object about which something is taught), a mediator in the learning process (a resource, methodology or procedure through which the content is taught), a teaching act (actions in the process), and all this, as Fernandez stated (1986, 1996), outside the real context where it happens.

The mere transmission of knowledge, by itself, acquires a unilateral value that lacks sense if it is not accompanied by another essential process to be effective, which is learning.

The learning process depends, to a great extent, on the human behavior and thought, as it aims to reach an integral development of the human being taking into account his needs and the social convictions around him (Zabalza, 1987). To attain this task requires order, structuring, and perfection of mental and personal functions (cognitive, behavioral and attitudinal). That is to say, instruction and formation. The instruction seeks for, through personal, group, institutional and instrumental acts, the optimization and perfecting of both the person and the action being carried out (e.g. learning a foreign language). This process is not supported in vacuum, but it looks for an external bracket that acts as backing and provides equilibrium, which in this case is information, preceded by a perfective intentionality and a search for a constant improvement and update.

Teaching, learning, training and instruction are elements of the teaching act that have been part of traditional education and should continue to do so in education today, since many of the educational activities are being implemented in virtual and electronic environments where new generations of learners learn by performing (learning by doing), working (Echeverría, 2012), creating, consulting, using, and sharing information and knowledge at all times and in all places (ubiquitous learning), since society raises today new needs that must be addressed and resolved.

This *e-space* to which the authors are referring, could be said to be a systemic space, in which the various components that constitute or variables interact, and where they are conditioned and modified (Canton & Pino-Juste, 2014) through activities and services that are developed on it. Something that we have to take into account at this point is that mobile devices are seldom used as isolated technologies. As Katz (2008) states, they do not exist in isolation, but in relation to technologies such as the landline phone, physical cable infrastructure, and the Internet. The mobile device is a multipurpose tool, the

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