Chapter 3
Profiling Internet Use of Portuguese Higher Education Students

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ABSTRACT

This chapter aims at providing as close a picture as possible of the engagement of HE students with the Internet, especially as regards Web 2.0, and of the knowledge, attitudes, skills and opportunities associated with this use. For this purpose, the following chapter presents the results of a review of empirical studies conducted on a set of analysis dimensions of Internet use, including access, intensity, scope, and participation in the creation and sharing of content, digital literacy revealed by the students using the Internet and opportunities for the development of activities associated with the effective/competent learners.

INTRODUCTION

The chapter aims at raising awareness of the different profiles of Internet users and the different aspects of the digital divide amongst higher education (HE) students, with a particular focus on the Portuguese context. Therefore, after reflecting on the relationship between HE students and information and communication technologies (ICT), particularly the Internet, empirical evidence will be presented that support a characterization of ways and places used for access, intensity of Internet use and diversity of the activities carried out online and of the web-based services used by HE students. Finally, the chapter summarizes what is suggested in several studies about the engagement of HE students in creating and sharing content on the Web, the components of digital literacy present (or absent) in the use of the Internet and the opportunities that students may be benefiting from within the online context.

Whenever possible, recent studies with Portuguese HE students are identified1. The authors seek to present studies that focus not only on the
educational, but also the general context. Another objective is to identify studies that tackle gender differences, given that current research has been addressing the relationship between gender and technology, as well as studies that approach differences in teaching subsystem and study field, considering the type of students on which the study focuses.

BACKGROUND

HE students constitute a group that is among the most connected and which presents a more intense use of ICT. Regarding this group, it is common to assume that all HE students are “online experts” or “new millennium learners,” that is, that all students are using multiple digital media intensively, effectively and efficiently for various purposes such as learning (Pedró, 2009).

The HE students’ age, education and access to technologies put them in a privileged position in the digital world (Correa, 2010). In the EDUCAUSE Center for Applied Research (ECAR) “Study of Undergraduate Students and Information Technology 2011”, the authors claim that most students come to campus with multiple technology devices - a majority of students own about a dozen - and they use these devices for a broad assortment of activities, both personal and academic (Dahlstrom et al., 2011, p. 4). Although there is evidence supporting that almost every student is used to accessing a computer connected to the Internet, there are still students, that don’t have their own device, or the confidence to use it on their own (Beetham, 2014). Current research has increasingly come to highlight that access to technologies by itself does not mean that they are being used efficiently, suggesting the existence of a “digital usage divide” or “second level digital divide”. Beyond the capabilities related to the use of different services and applications, it is necessary for people to have the motivation and skills to apply these services in a strategic and innovative way in different contexts of their lives, for their own benefit and for society’s as well (Ala-Mutka, 2011).

Research on HE students has also tackled the “digital usage divide”: the digital divide, the division between the digital ‘haves’ and ‘have nots’, has not been entirely overcome and persists in several dimensions: in access to, and engagement with, technology; the capability of the technology; and in individual competence (Committee of Inquiry into the Changing Learner Experience, 2009, p. 6). In the “New millennium learners in higher education: evidence and policy implications” report, Pedró (2009, p. 7) also states that the whole, the available evidence depicts a complex and nuanced picture. On the one hand, the assumption that higher education students constitute the social category that shows the most intense and varied use of digital media can be sustained with data coming from different surveys. (...) But on the other hand, it would be dangerous to assume that this applies universally to all students in higher education. There are clear indications of the emergence of different student profiles, which go beyond levels of access to include issues of intensity and variety of uses.

The ECAR, for instance, has disclosed quite different technology adoption patterns by HE students and that they are often associated with their use and experience with ICT, both in the general and academic context. After asking students to choose the sentence that best describes them with regard to the adoption of technologies, and mapping the response in an Everett Rogers adoption model, published in his 1962 book “Diffusion of Innovations”, Smith and Caruso (2010) conclude that about half of the students identify themselves as mainstream adopters, with a percentage decrease in the categories of previous and subsequent adoption. The study also highlights the gender gap that has persisted over the years noting that, in 2010, a little over half of male users see themselves as