### Chapter 5

## Study and Non-Study Related Technologies use of Flemish Students in Higher Education

**Steven Bruneel** 

Katholieke Universiteit Leuven, Belgium

Jan Elen

Katholieke Universiteit Leuven, Belgium

**Kurt De Wit** 

Katholieke Universiteit Leuven, Belgium

Jef C. Verhoeven

Katholieke Universiteit Leuven, Belgium

#### **ABSTRACT**

"Living technologies", such as social networking sites and mobile phones are, nowadays, the subject of educational research. In this chapter we attempt to shed light on the relationship between the reasons for the use of living technologies and learning technologies from students' perspectives. In this exploratory research project, 15 students were interviewed several times throughout the academic year and 143 students, from various bachelor programs at a Flemish university (Flanders/Belgium) completed an online survey. Results demonstrate that these students make a clear distinction with regard to the frequency and reasons for use of living technologies and learning technologies, with these students rarely use living technologies (for instance, Facebook or mobile phones) for educational purposes. Results are explained in terms of privacy and the reluctance to use particular applications for several non-educational reasons. We end with some possible suggestions for follow-up research.

#### INTRODUCTION

For several years, many researchers have conducted empirical research with respect to information and communication technologies (ICT) and higher education (e.g. Kennedy, Judd, Churchward, Gray & Krause, 2008b; Lorenzo, Oblinger, & Dziuban, 2006). However, few researchers have investigated

DOI: 10.4018/978-1-4666-2919-6.ch005

what higher education students actually do when they are staring at their screens. In our research, we wished to shed light on students' use and meanings of study-related use of ICT. We asked the students how much time they spent using ICT applications and for what reasons. More precisely, we wanted to unravel the relationship between study and non-study related ICT use from students' perspectives. Therefore, the following central research question was developed: "How do

living technologies relate to learning technologies concerning frequency, time and educational use from students' perspectives?"

In order to answer the central research question, we begin from our theoretical background on the complex relationship between ICT and education, by outlining some terms and well-known research outcomes. Next, we look more in depth at the popularity of so-called "living technologies". In our research, only four kinds of living technologies were studied (namely computers, mobile phones, video games, and mp3 players). This is followed by a summary of the rise of learning technologies, with virtual learning environments (VLEs) as one of the most popular types of educational application. Through the literature review, we show whether or not living technologies are embedded in higher education. We end our theoretical framework by showing to what extent students and the faculty are inclined to use living technologies in their educational activities. The section on methodology is then followed by the results obtained from the research. These data are addressed in the same way as our theoretical background: first we outline the results concerning the rate and use of living technologies, followed by a discussion of students' use of learning technologies. Next, we show whether or not living technologies are embedded in higher education from the students' point of view. Finally, we conclude with a reflection on the research outcomes, in order to attempt to explain some phenomena observed, and to provide suggestions for follow-up research.

#### THEORETICAL BACKGROUND

#### Students and ICT

Throughout the last decade, many researchers argued that the current generation of learners has grown up with ICT as an integral and very important part of their everyday lives. This generation has been referred to as "digital natives" (Prensky,

2001). These young people are (p.1) "surrounded by and using computers, video games, digital music players, video cams, cell phones, and all the other toys and tools of the digital age" (Prensky, 2001. Howe and Strauss (2000) referred to them as "Millennials", which they perceived to be a generation quite different from the previous, the "Generation X" (cf. Bennett, Maton, & Kervin, 2008; Pedró, 2006). In the literature other assertions are made, for instance, because Millennials are defined as being very creative with technologies and highly skilled at multitasking, they are also referred to as the "Net Generation" (Oblinger & Oblinger, 2005; Tapscott, 1998) or the "Instant-Message Generation", referring to the popularity of Instant Messages (Lenhart, Rainie & Lewis, 2001). Given the immense popularity among young people of video games, Carstens and Beck (2005) call them, not surprisingly, the "Gamer Generation". Finally Veen (2003) refers to this generation as the "homo zappiens", for their ability to control simultaneously different sources of digital information. Summarizing, one can state that today's students are very familiar with different types of ICT.

Despite the variety of labels, many educational researchers have raised the same fundamental question: is our current education equipped to meet the needs of today's students (cf. Bennett et al., 2008)? Tapscott (1998, p. 131) for example states: "There is growing appreciation that the old approach is ill-suited to the intellectual, social, motivational, and emotional needs of the new generation". Similar conclusions can be found in Veen (2005, p. 6): "... the education system itself will experience difficulties in keeping up the old teaching methods for students who think schools and traditional training is irrelevant to them". In other words, the differences are so significant that the nature of education itself must fundamentally change to accommodate the skills and interests of new generation of students. Moreover, there is also a substantial gap in ICT skills between the students and the faculty; Prensky (2001) refers to

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/study-non-study-related-technologies/75026

#### Related Content

#### Cost-Benefit Analysis of Participation in Standardization: Developing a Calculation Tool

Henk J. de Vriesand Joey L. Veurink (2017). *International Journal of Standardization Research (pp. 1-15).* www.irma-international.org/article/cost-benefit-analysis-of-participation-in-standardization/192138

#### Transport Layer for Cognitive Radio Sensor Networks

Yasir Saleemand Farrukh Salim (2015). Standards and Standardization: Concepts, Methodologies, Tools, and Applications (pp. 361-386).

www.irma-international.org/chapter/transport-layer-for-cognitive-radio-sensor-networks/125301

#### Cognitive Cooperation in Wireless Networks

Eng Hwee Ongand Jamil Y. Khan (2013). *IT Policy and Ethics: Concepts, Methodologies, Tools, and Applications (pp. 1498-1522).* 

www.irma-international.org/chapter/cognitive-cooperation-wireless-networks/75088

# Innovative or Indefensible?: An Empirical Assessment of Patenting within Standard Setting Anne Layne-Farrar (2011). *International Journal of IT Standards and Standardization Research (pp. 1-18)*. www.irma-international.org/article/innovative-indefensible-empirical-assessment-patenting/56357

## Medium Access Control Protocols for Wireless Sensor Networks: Design Space, Challenges, and Future Directions

Pardeep Kumarand Mesut Gunes (2013). IT Policy and Ethics: Concepts, Methodologies, Tools, and Applications (pp. 947-974).

www.irma-international.org/chapter/medium-access-control-protocols-wireless/75064