Chapter 47
Tracing the Use of Communication Technologies in Higher Education

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ABSTRACT

This chapter presents a comprehensive view of the main activities and findings of a research project entitled TRACER-Portuguese Public Higher Education Use of Communication Technologies, which focused on how the information about the use of Communication Technologies in Higher Education Institutions can be collected, systematized, processed, and deployed to stakeholders. The project was carried out between 2011 and 2014 and its main results are a consolidated proposal of an analysis model to address the use of Communication Technologies in Higher Education institutions, as well as the U-TRACER® tool. This Web-based tool provides support to the process of collecting, processing, and deployment of data related with the use of Communication Technologies in a specific Higher Education or in a group of institutions, based on institutional or geographical criteria.

INTRODUCTION

Since the revolution fostered by the dissemination of the Internet, Communication Technologies (CTs) have been playing a major role in Higher Education (HE) as a trigger to new and challenging approaches to teaching and learning. Besides, the strategic options of Higher Education Institutions (HEIs) have also been strongly influenced by the power that CTs – such as email, blogs, wikis, social networks, videoconferencing systems, Virtual Learning Environments/Learning Management Systems, 3D virtual worlds – provide as a way to address new and diverse target audiences, opening possibilities for the broadening of the activity of HEIs in new markets through lifelong learning and internationalization approaches.

The reinforcement of the role CTs have in a new generation of Education policies in the European Union has been widely envisaged in several strategic decisions, namely regarding the effort to establish a European Higher Education Area. The Europe 2020/Horizon 2020 research framework clearly addresses the need for new approaches to helping people of all ages anticipate and manage change through investment in skills and training, paving the way to modernizing labour markets and raising employment levels leading to smart and inclusive growth.

The international research community has also widely addressed the need for deepening the understanding on how CTs may positively influence how students learn, discussing the role of topics such as CTs mediated collaborative learning practices, CTs based/online distance education or, more recently, massive open online courses (MOOCs). The success of several MOOC initiatives are pointing out the importance students are giving to the way HEIs use CTs in deploying new teaching and learning models that provide advanced levels of flexibility and openness in time, space, context, contents and curricula (Anderson, 2013; Gillani & Eynon, 2014; Nkuyubwatsi, 2014).

This move towards the relevance of the use of CTs in HE requires research on analysis models and methods aiming at characterizing the use of CTs in HEIs and on tools that may help deploying systematized information to stakeholders. These include regulatory and institutional policy makers, teachers, students, families, i.e., everyone having responsibility on options about the use of CTs in HEIs or willing to acknowledge the information about how HEIs use CTs as a basis for deciding which HEI to apply for.

In this chapter, some information as to these topics is put forward, by presenting and discussing the main findings and results of a research project entitled TRACER-Portuguese Public Higher Education Use of Communication Technologies (http://cms.ua.pt/TRACER), through which it was aimed to study how information concerning HEIs' use of CTs can be systematized, retrieved, processed and deployed to stakeholders. Despite the existence, in specialized literature, of several reports about research on this topic (Conole & Alevizou, 2010, Coutinho & Junior, 2008; Dahlstrom et al., 2011; EHEA, 2012; Franklin & Harmelen, 2007; O'Neill & Colley, 2006; Pempek et al., 2009; Puente, 2007; Santos et al., 2011; Selwyn, 2007; UNESCO, 2009; Vercruysse & Proteasa, 2012), the lack of a comprehensive and systematic approach to the analysis of the use of CT in HEIs was identified. Consequently this project also aimed at contributing to improve awareness and transparency in the Portuguese HE system by deploying a web-based data retrieval tool enabling open and easy access to the details about how Portuguese HEIs' use CTs.

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