Chapter 57
Researching the Use of Communication Technologies in Higher Education Institutions in Portugal

João Batista
University of Aveiro, Portugal

Salomé Morais
Polytechnic Institute of Viseu, Portugal

Fernando Ramos
University of Aveiro, Portugal

ABSTRACT

This chapter describes a research which main purpose was identifying and characterizing the use of Communication Technologies by Portuguese Public Higher Education Institutions to support learning activities. An analysis model was created and used to develop a nationwide online survey used to collect data from students, teachers and institutional managers. The results show that institutional policies and resources are in place and being used to support learning; learning management systems and interpersonal communication technologies are intensely used and widely adopted; and that there are gender differences as far as the students' use of Communication Technologies is concerned. The results of this study provide a useful insight on the use of Communication Technologies by Portuguese Public Higher Education Institutions and give valuable information for ongoing decision making processes regarding the institutional adoption and development of learning models that take advantage of these technologies.

INTRODUCTION

Currently, it is consensual the relevance of using Communication Technologies (CT) as a contribution to enhance teaching and learning in Higher Education (HE) contexts. Although there are numerous research works on this topic, very few comprehensively address the reality of Portuguese HE. In order to contribute to characterize the Portuguese reality, a nationwide study was developed with the main

objective to identify and characterize the use of CT to support learning in Portuguese Public Higher Education Institutions (PPHEI).

This research focused on two distinct perspectives about the use of CT: the institutional perspective and the gender perspective. For this purpose, CT are the technologies which allow communication and are supported by the Internet.

The study of the institutional perspective concentrates on the perceptions that teachers and staff with institutional responsibilities have on the use of CT. The main objectives to be achieved related with the institutional perspective were:

- Identify the CT used in PPHEI to support learning;
- Characterize the use of CT by PPHEI, the perception of the difficulties encountered and the opportunities and challenges in providing learning support.

The study of the gender perspective paid specific attention to the perceptions of students and includes a special focus on how gender influences those perceptions. The main objectives of this perspective were:

- Identify the CT used by students of PPHEI;
- Identify the purposes and the frequencies of use and the locations of access of CT;
- Characterize the value that students perceive of using CT in learning environment;
- Understand the attitudes and preferences of students regarding the use of CT;
- Identify differences between the use of CT in personal and in learning contexts.

The next section presents a literature review on the use of CT in HE, which supports the original model of analysis especially designed for this research. The document follows with a detailed description of the research methodology adopted and also of the study implementation process. Finally, the main results are described and discussed, and some conclusions are outlined. The results of this study are potentially useful in decision-making processes, particularly those involving the Higher Education Institutions (HEI), and the issues related to students.

BACKGROUND

The technological environment, which characterizes our current society, offers a whole range of new opportunities and challenges for education and training (Conole & Alevizou, 2010). It seems to be clear that technologies play an important role in HE arena, both to teachers and students, in supporting teaching and learning activities, fostering the creation of enriched environments, with high levels of interpersonal communication, sharing, collaboration and participation (Dahlstrom, Boor, Grunwald, & Vockley, 2011; Lam, McNaught, Lee, & Chan, 2014).

Technology adoption creates new challenges and promotes changes in the institutional routines in HE. Information and Communication Technologies (ICT) have been increasingly adopted by HEI to accomplish several different activities, such as: administrative tasks, institutional communication, research, and supporting teaching and learning processes as well (Bates & Sangra, 2011; Ehlers & Schneckenberg, 2010).

The use of technology in HE allows new pedagogical developments and enable the adoption of new approaches to education and training, characterized mainly by greater flexibility in space and time,

24 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/researching-the-use-of-communication-technologies-in-higher-education-institutions-in-portugal/159767

Related Content

Telehealth as an Innovative Supply Chain and Logistics Management Approach
Darrell Norman Burrell (2022). *International Journal of Health Systems and Translational Medicine (pp. 1-9).*
www.irma-international.org/article/telehealth-as-an-innovative-supply-chain-and-logistics-management-approach/306971

Predictive Modeling for Improving Healthcare Using IoT: Role of Predictive Models in Healthcare Using IoT
Jayanthi Jagannathanand Udaykumar U. (2020). *Incorporating the Internet of Things in Healthcare Applications and Wearable Devices (pp. 243-254).*
www.irma-international.org/chapter/predictive-modeling-for-improving-healthcare-using-iot/238982

GAN-Based Medical Images Synthesis: A Review
Huan Yangand Pengjiang Qian (2021). *International Journal of Health Systems and Translational Medicine (pp. 1-9).*
www.irma-international.org/article/gan-based-medical-images-synthesis/277366

Research on multi-view clustering algorithm on epileptic EEG signal
 (2022). *International Journal of Health Systems and Translational Medicine (pp. 0-0).*
www.irma-international.org/article//282682

COVID-19 in India: Emergence, Implications, and Possible Precautionary Measure for Disease Transmission in Indian Healthcare Workers
Prashant Johri, Vivek Sen Saxena, Ahmad T. Al-Taani, Pallavi Murghai Goeland Nitin Kumar Gaur (2022). *International Journal of Health Systems and Translational Medicine (pp. 1-13).*
www.irma-international.org/article/covid-19-in-india/282704