

## Chapter 6

# Higher Education and Web 2.0: Barriers and Best Practices From the Standpoint of Practitioners

**Pedro Isaias**

*The University of Queensland, Australia*

**Paula Miranda**

*Polytechnic Institute of Setubal, Portugal*

**Sara Pifano**

*Information Society Research Lab, Portugal*

### ABSTRACT

*The abundance of evidence of Web 2.0's value in educational settings has provided both educators and researchers with prized information about the application of a panoply of technologies. The experience that this evidence portrays can be used to meaningfully direct teachers in their own ventures of Web 2.0 implementation. In online learning environments, any collaboration between the students must occur with the support of technology, so it is fundamental that technology functions as an enabler, maximizing the opportunities that online settings offer, and that students can tap into those technologies to enhance their learning experience. This chapter focuses on the implementation of Web 2.0 within higher education from the viewpoint of e-learning experts. It reports on the findings of an online questionnaire that examined both the barriers and the best practices of implementation and that was applied internationally among researchers and teachers in the higher education sector.*

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## INTRODUCTION

Web 2.0, as originally coined by O'Reilly (2007), refers to a stance towards the use of the Web, rather than a technology in itself that is associated with several precepts namely collective intelligence, user participation, content edition, software that improves the more it is used, and rich user experience. As it evolved, Web 2.0 began to reach different sectors of society with the development of tools, sites and applications that people could use namely for recreational, business, health and educational purposes. Within educational contexts its use is been widely documented and explored (Echeng, Usoro, & Ewuzie, 2016; Isaias, Miranda, & Pifano, 2017; Karvounidis, Chimos, Bersimis, & Douligeris, 2018; Marosan, Josanov, & Savic, 2015; Pieri & Diamantini, 2014; Rogers-Estable, 2014; Soomro, Zai, & Jafri, 2015; Virtanen & Rasi, 2017).

In an attempt to depict existing Web 2.0 technologies, Bower (2015) study attests to the existence of more than 200 different technologies with applicability in learning and teaching. Education's partnership with Web 2.0 causes learning to become more interactive and collaborative, giving students the possibility of generating and exchanging their own content (Isaias, Miranda, & Pifano, 2009). Regardless of a wide variety of educational benefits Web 2.0 technologies' potential persists unattained (Jimoyiannis, 2015). This reality results in a pressing need to examine the barriers to its implementation as well as the best practices that can guide educators in their innovative experiments with these technologies. In order to address the existing barriers and maximise the benefits that Web 2.0 purports, a scrupulous implementation plan needs to be put in place. There are several aspects that teachers must take into account when applying Web 2.0 to their courses. It is important to begin with a careful selection of the technology that is more suitable (Holenko Dlab, Candrljic, & Sabranovic, 2016) for the attainment of the specific learning goals. Where needed, teacher training should be encouraged (Baltodano, 2016). Also, the tools that are selected need to be intuitive, so that the students can easily use them (Pieri & Diamantini, 2014). It is equally essential stimulate student participation, as the more students participate, the more that will motivate others to contribute (Chen, Yen, & Hwang, 2012).

This chapter begins with a theoretical background about the use of Web 2.0 in higher education, the obstacles associated to its implementation and recommended guidelines for its deployment. It then describes the methods that were used in this research and presents the results that were obtained via the online questionnaires. It concludes with a discussion of this study's outcomes and their significance for the context of Web 2.0 implementation in higher education courses.

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