

Chapter 45

Social Space or Pedagogic Powerhouse: Do Digital Natives Appreciate the Potential of Web 2.0 Technologies for Learning?

Stephen M. Rutherford
Cardiff University, UK

Henrietta J. Standley
Cardiff University, UK

ABSTRACT

The recent development of Web 2.0 technologies has the potential to transform the learning environment of Higher Education (HE). Web 2.0 technologies are already commonplace within the social space, with the use of social media, co-authored online resources and encyclopaedias, blogs and video sources. Web 2.0 tools also have the potential to greatly enhance activity in educational environments. However, learners are not using Web 2.0 technology to its optimum potential outside of formal learning situations. Findings suggest that despite being digital natives and being aware of the technologies themselves, students may be naïve of the potential of Web 2.0 technologies as tools for the development of their learning. Educators in HE therefore need to actively expose our learners to the range of potentials of Web 2.0 technologies, if our students are to be able to innovate and engage with technology to its full extent.

INTRODUCTION

The current generation of students in Higher Education (HE) are often considered to be ‘digital natives’ (Prensky, 2001); that is students who have grown up with information and communication technology (ICT) and are immersed in its use in everyday life. This ubiquitous involvement with technology may be a challenge for those educating the students, who are likely to be ‘digital immigrants’ (Prensky, 2001), those who utilise these contemporary technologies, but were raised in an environment which was not technology-immersed. Therefore educators in HE are likely to be faced with using often unfamiliar

DOI: 10.4018/978-1-5225-3417-4.ch045

technologies while instructing those for whom these technologies are commonplace. This dichotomy will have impact on the manner in which technology is used by both teachers and students in HE to support the learning process.

One of these recent technological developments is the advent of Web 2.0 tools. Web 2.0 technologies are collaborative and interactive, cloud-based tools, usually free to use across the internet. Web 2.0 technologies are characterised by the paradigm of enabling interactions between the author and the users, or between multiple authors. Web 2.0 technologies are ubiquitous in contemporary society, with examples such as social media (e.g. Facebook), Video-sharing sites (such as YouTube), co-authored websites (wikis, such as Wikipedia) and collaborative authoring software (such as Google Drive). As a result, the outputs of Web 2.0 technology have a democratising effect on the construction and sharing of knowledge. This ability to co-author content, or comment upon outputs, means that Web 2.0 technologies have great potential for the enhancement of learning, especially collaborative learning, both in and out of the classroom. Web 2.0 and other technologies are already used by many University teachers to support distance learning, blended learning and assessment. The recent adoption of Massive Open Online Courses (MOOCs; Bayne & Ross, 2013) by HE institutions in several countries illustrates the potential impact of interactive technologies for the HE sector. The use of technologies for collaborative learning approaches is also well documented, with computer-supported collaborative learning (CSCL) being a well-established and proven pedagogy (Stahl, Koschmann, & Suthers, 2006).

Following the paradigm for digital natives, contemporary students in HE institutions are well-versed, in general, in the use of Web 2.0 technologies. Web 2.0 technologies are common within social environments, such as the use of social media, online resources and encyclopaedias, video-sharing sites, blogs and similar social media. The use of these Web 2.0 tools, however, is primarily for communication, social interaction and the publication of opinions and views. Where the technologies are adopted by users as learning tools, they tend to be used in a less-interactive manner than in their use as social tools. Web 2.0 technologies have been adopted successfully as learning and teaching tools by teachers, utilising the interactive nature of the technologies to facilitate the collaborative learning process through CSCL. However, evidence for the adoption of Web 2.0 technologies as interactive learning tools (rather than simply as sources of information) by the students themselves outside of formal learning situations is limited.

This chapter evaluates the potential of Web 2.0 technologies as tools for learning and teaching in the HE sector. This chapter suggests that despite their prevalence in formal learning and teaching environments, Web 2.0 technologies may not be used to their optimum potential by learners outside of formal learning situations or scaffolded learning activities. Through a survey and interviews with students in a UK University, this chapter investigates the degree to which contemporary students in HE are aware of the potential of Web 2.0 technologies for their learning. The observations suggest that despite their being aware of the technologies themselves, and their impact upon the democratisation of knowledge and understanding, students may be naïve of the potential of Web 2.0 technologies as tools for the development of their learning.

The successful adoption of technology by the HE sector will require both academics and students to be aware of the full potential of those technologies to support the learning process. The HE sector, therefore, needs to develop a dialogue between learners and teachers in order to develop a shared understanding of how Web 2.0 collaborative technologies can enhance the learning process. Digital natives may need to be encouraged to undertake a paradigm shift in their understanding of how Web 2.0 technologies can be used, transforming their view of these technologies from their use as social and co-operative tools,

25 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/social-space-or-pedagogic-powerhouse/188978

Related Content

A Framework for Digital Competence Assessment

Antonio Cartelli (2012). *Current Trends and Future Practices for Digital Literacy and Competence* (pp. 47-63).

www.irma-international.org/chapter/framework-digital-competence-assessment/65634

Digital Inequality Among States at a European Level

Dario Pizzul (2021). *International Journal of Digital Literacy and Digital Competence* (pp. 1-19).

www.irma-international.org/article/digital-inequality-among-states-at-a-european-level/291969

An Examination of Literacy and Computer Literacy Amongst Adults Who Are Incarcerated: An Analysis of the PIAAC

Julia J. Yi (2021). *International Journal of Digital Literacy and Digital Competence* (pp. 20-31).

www.irma-international.org/article/an-examination-of-literacy-and-computer-literacy-amongst-adults-who-are-incarcerated/291970

Breaking Down Silos: Strategies for Collaborative Technology Integration in Higher Education

Menard Musendekwa (2025). *Institutes of Higher Education (IHE) and Workforce Collaboration for Digital Literacy* (pp. 1-48).

www.irma-international.org/chapter/breaking-down-silos/376019

Integration of Web 2.0 Tools into Non-Formal Learning Practices: Exploring IBM's Digital Spaces

Ayse Kok (2014). *International Journal of Digital Literacy and Digital Competence* (pp. 12-31).

www.irma-international.org/article/integration-of-web-20-tools-into-non-formal-learning-practices/115895