Chapter 60
Catering to the Needs of the "Digital Natives" or Educating the "Net Generation"?

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ABSTRACT

In this chapter, the authors explore perspectives on the notion of "digital natives" and present a case in which Web 2.0 technologies were introduced to students. They discuss studies critical of the generational metaphor, and argue that it should not be uncritically assumed that there is a generation of digital natives, but that young people may need to develop skills often associated with the digital natives. The authors present a case reflecting these pedagogical aims, involving an online Web 2.0 learning environment called Ekademia. The findings of the case reflect a gap between the researchers' intentions and the actual outcomes. In particular, the learning environment failed to provide sufficient scaffolding for the students, who needed more support than was assumed. It is therefore suggested that educational use of social software technologies should have stronger connections to curricular activities, involve a more concerted pedagogical effort, and be supported by a higher degree of institutionalization.

INTRODUCTION

In the last 10 to 15 years, the rapid development of the Internet and mobile devices and the increased popularity of computer and video games have created an intense interest in the generation that has grown up with these technologies as part of everyday life. The increased use of information and communication technology (ICT) by children and young people has led to claims about an emerging generational gap between the young, tech-savvy "digital natives" and the older, technologically challenged "digital immigrants" (Prensky, 2001).

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Furthermore, this has led to calls for educational change to accommodate the needs of the new generation of students entering schools and universities. Within an even shorter time span, we have witnessed radical popularization of a range of social computing technologies often referred to as Web 2.0, which has resulted in an explosion of multimedia user-generated content on the World Wide Web. This has further fuelled the notions of digital natives or the "Net Generation," also referred to as "Generation Y," who, it is argued, are part of a collaborative, participatory culture in which creative production, remixing of digital media, and the development of advanced learning capabilities take place through informal use of ICT. Therefore, it has been claimed that we need to fundamentally rethink the entire educational system to accommodate and cater to the needs of students belonging to this new generation (Prensky, 2001). The argument in support of this rests on the supposed advanced skills of Generation Y, and the assertion that they are bored with traditional education and desire learning environments that reflect their rich, varied, and sophisticated use of technology. However, claims about marked generational discontinuities and the need to rethink the entire educational system have been called into question by some researchers, who frame it as a "moral panic" (Bennett, Maton, & Kervin, 2008, p. 776) in academia and contend that the assumptions lack empirical basis. In this chapter, the digital natives and Net Generation Ideas are critically examined and questioned. A case relating to this discussion is presented and used not only to illustrate some the possibilities afforded by Web 2.0 and social software technologies, but also to highlight some of the difficulties associated with their educational use. What is known about contemporary students or "digital natives," their assumed abilities and skills, and the challenges and opportunities brought about by Web 2.0 are also examined.

The chapter therefore begins by considering some of the potential problems with generational labels such as those reflected in the digital natives and Net Generation concepts, along with their ability to inform educational change. In doing so, the chapter highlights and explores the skills and literacies that young people potentially have, or will need to develop, along with the resulting implications and challenges for formal education. The case study is then presented to highlight different aspects of Web 2.0 in higher education. It is based on a small-scale experiment with social networking technologies in a university context, and was carried out by one of the authors in collaboration with local colleagues. The participants were 180 first-year students at a Danish university, who were invited into a web-based environment called Ekademia ("Ecademy") upon commencement of their studies in humanistic informatics in September 2007. The online environment contained features often characterized as social software or Web 2.0, such as blogs, social networking, personal profiles, podcasting, widgets, Really Simple Syndication (RSS) feed integration, tagging, and so forth.

The case is introduced by reviewing and synthesizing some of the current ideas about Web 2.0 in teaching and learning contexts. The pedagogical aims/intentions and design of Ekademia are described and related to the learning outcomes and literacies that were intended to support or strengthen skills among the students. The outcomes of the experiment are then analyzed and discussed by drawing on the empirical data collected through a survey and through participant observation. In the concluding section, the advantages and limitations of such small-scale experiments are briefly covered.

IS THERE REALLY A GENERATION OF HIGHLY ICT-LITERATE "DIGITAL NATIVES"?

"Digital natives" and other similar generational labels, such as the "Net Generation," "Generation