# Chapter 1 Online Learning Engages Students of the Digital Age

Jill A. Ashbaugh Earman Duquesne University, USA

#### **ABSTRACT**

Technology capabilities are rapidly growing in the world of education. As distance education applications are being designed to be more user-friendly, online learning opportunities are becoming more of a reality in secondary schools and institutions of higher education, with students enrolling in online and blended courses. Many of the early and current distance learners are "digital immigrants," that is, they are not well-versed in technology systems and need to adjust to a whole new way of learning to succeed in the online environment. However, future students enrolling in online courses will be "digital natives," students who have grown up surrounded by the ever-evolving technology of the digital age. Digital natives acquire and process information in ways that are far different than previous generations, requiring educators to re-think the design and delivery of relevant curriculum. This chapter will discuss the phenomenon of digital natives and immigrants, current practices and perceptions, and a successful model of online learning in an upper elementary school classroom.

#### INTRODUCTION

Technology capabilities are rapidly growing in the world of education. As online course management software applications are being designed to be more user-friendly, online learning opportunities are becoming more of a reality in secondary schools and institutions of higher education. In the fall 2005

DOI: 10.4018/978-1-61520-899-9.ch001

term, almost 3.2 million students were enrolled in at least one online course at the post-secondary level, representing an increase of 35 percent over the previous year (Allen & Seaman, 2006). By the fall of 2007, that number had increased to almost four million students (Allen & Seaman, 2008). During the 2005-2006 school year, 63.1 percent of school districts in the United States had students enrolled in online or blended courses (Picciano &

Seaman, 2007). Only two years later, that number had increased to 75% (Picciano & Seaman, 2009).

A variety of training opportunities have been employed to prepare instructors to meet the unique demands of the online learning environment, however a new phenomenon has emerged that requires further inquiry. Many of the early and current distance learners are "digital immigrants," that is, they are not well-versed in technology systems and need to adjust to a whole new way of learning to succeed in the online environment. According to Cross (2006):

In 2006, virtually everyone in the U.S. over the age of 30 or so has become an immigrant in their own country – digital immigrants. In this definition, being an immigrant means being new to the digital culture, not knowing of or understanding the nuances on which a culture is built. In essence, a large group of Americans is bicultural... Speaking the same technological language exists within the larger digital culture much like speaking a language is part of any other culture. To function fully in any culture, one must speak the language. (p. 52)

The dilemma in designing online learning opportunities is that a large portion of current and future students enrolling in online courses will be "digital natives," students who have "spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age" (Prensky, 2001, p. 1). Prensky posits that as a result of growing up immersed in a technology environment, digital natives acquire and process information in ways that are far different than previous generations. Being digital natives means that the nuances of the culture are accessible and make sense to them. As Oblinger (2004) points out:

There is a growing body of evidence that students have developed a different set of attitudes and

aptitudes as a result of growing up in an IT and media-rich environment. While this may provide great advantages in areas such as their ability to use information technology and to work collaboratively, it may create a disconnect between their expectations and the learning environments they find in colleges and universities. (p. 15)

The relationships between technology and pedagogy must be scrutinized in order to improve the curriculum for the digital age (Giroux, 1994). It is imperative that online programs are designed to meet the needs of the learners. In order to further explore the idea of developing appropriate online learning environments, this chapter will discuss current practices and perceptions of online learning within the context of the phenomenon of digital natives and immigrants. A case study describing a successful model of online learning in an upper elementary school classroom will demonstrate that a rigorous and relevant curriculum can be provided that meets the learning preferences of digital natives.

#### **BACKGROUND**

Digital immigrants typically choose online learning environments due to the flexibility, convenience, and accessibility of the courses. Adults appreciate being able to do their coursework from their homes or offices. Asynchronous learning environments allow them access to their learning at any time, from anywhere there is Internet access. Even when course participants meet in a synchronous environment, such as a chat room, they still have the convenience of not having to travel to a college campus to attend class. These digital immigrants generally value online courses that mirror the content and delivery of face-to-face courses (Greenberg, Vojir, & Whitney, 2000). They are not interested in the graphics, video, 3-D immersive simulations and other technology innovations that can be provided by the high-tech 11 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/online-learning-engages-students-digital/44351

#### Related Content

#### An Agent-Based Framework for Personalized E-Learning Services

Larbi Esmahi (2007). *International Journal of Web-Based Learning and Teaching Technologies (pp. 1-11)*. www.irma-international.org/article/agent-based-framework-personalized-learning/2990

### Dominant Meanings Approach Towards Individualized Web Search for Learning Environments

Mohammed A. Razek, Claude Frassonand Marc Kaltenbach (2006). *Advances in Web-Based Education:* Personalized Learning Environments (pp. 46-69).

www.irma-international.org/chapter/dominant-meanings-approach-towards-individualized/4957

#### Teaching Dimension in Web-Based Learning Communities

Francesca Pozzi (2010). Web-Based Education: Concepts, Methodologies, Tools and Applications (pp. 1472-1481).

www.irma-international.org/chapter/teaching-dimension-web-based-learning/41426

## Designing and Managing Synchronous and Asynchronous Activities: The Online Training Case for Faculty of Aeronautics and Astronautics Staff

Nazire Burcin Hamutoglu, Nilgün Özdamar, Nuray Gedikand Engin Kapkn (2022). *Handbook of Research on Managing and Designing Online Courses in Synchronous and Asynchronous Environments (pp. 51-76).* www.irma-international.org/chapter/designing-and-managing-synchronous-and-asynchronous-activities/292358

#### Beyond the Learning Poverty and Labels: A Theoretical Study for Inclusive Education

Annalisa Ianniello, Tonia De Giuseppeand Felice Corona (2023). Handbook of Research on Establishing Digital Competencies in the Pursuit of Online Learning (pp. 1-18).

www.irm a-in ternational.org/chapter/beyond-the-learning-poverty- and-labels/326566