Chapter 1 The Digital Information Divide

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ABSTRACT

This chapter explores the gap in information between digital natives and digital immigrants. Advances in computer technology have transformed information, and resulting changes in information behavior clearly mark the digital information divide. These changes in information behavior have affected information literacy instruction, yet educators have opted for quick fix strategies, ignoring the need to develop a comprehensive information literacy curriculum for the digital age. Partnerships—between primary, secondary, and postsecondary teachers and librarians and curriculum designers working to establish a vertically and horizontally scaffolded K-16 information literacy curriculum—may effectively bridge the divide.

INTRODUCTION

Educational environments have been witness to the widening gap between digital immigrant teachers and digital native students, though many working in higher education in particular are still not quite ready to acknowledge it. This gap is much more than a gap in technological literacy or competency; it is a gap in information that has continued to widen due to the strong resistance in most educational environments to information

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beyond that found in the library. While digital natives with their increasing reliance and comfort with computer technology are filling classrooms to capacity, the digital immigrant teachers they encounter remain, for the most part, slow and hesitant to join their students in the digital age. These teachers are, as the editor of this collection suggests in his introduction, trapped in a past in which the only way to access information is either to hear it in a lecture or find it on a shelf in the library. These teachers are likely aware that computer technology has radically reshaped the authoring, amount, and access points for in-

formation, yet many of them, particularly those at the postsecondary level, remain hostile to any information taken from non-traditional sources, especially those on the Web. The information environment of the university—and to a lesser extent the elementary as well as the junior and senior high school—is essentially a traditional one, thus fueling the digital information divide.

In the process of coining the terms in his 2001 article from On the Horizon, Prensky divides "digital native" students from "digital immigrant" teachers. In defining students as digital natives, Prensky claims, "Today's students-K through college—represent the first generations to grow up with this new technology. They have spent their entire lives surrounded by and using computers...and all the other toys and tools of the digital age" (p. 1). Students are digital natives and digital consumers, and they are being consumed by the technologies that surround them. In fact, it has been suggested that students could spend up to 10,000 hours on the Web by the time they graduate from college (Bylin, 2009, para. 13). Unlike their digital native students, most teachers are immigrants to digital technologies, adapting to and working with them as needed but valuing and remembering a past that is radically different, according to Prensky. These disparate takes on technology create the digital divide, a separation based on such deep-seated change that Prensky leaves his readers with the provocative claim that "today's students think and process information fundamentally differently" (p. 1).

Prensky uses a linguistic approach in his essay to mark these two groups—claiming they in essence speak different languages—and he maintains that this linguistic divide separates teachers from their students, making it difficult to understand, communicate with, and most importantly teach them. Prensky summarizes this view when he writes, "Today's students are no longer the people our educational system was designed to teach" (p. 1). Prensky goes on to provide several examples of the digital divide, such as networked learning,

multitasking behaviors, visual versus print literacy, and "legacy" versus "future" content. Prensky uses these examples to make his argument for new teaching "methodologies for all subjects, at all levels, using our students to guide us" (p. 6).

It should be noted that Prensky's work is certainly not without its critics. Interestingly, most critics focus on the terms of his title, "Digital Natives, Digital Immigrants," his linguistic approach, and the divisive nature of his claims (Flintoff, 2007; Fryer, 2006; Jenkins, 2007; Kennedy and Krause, 2008), thus avoiding the more complicated turn toward the flaws in our educational system, to the possibility that the ways we teach students today do not help them learn¹. Flaws, I will argue, created by profound changes in information. In this chapter, I detail these changes in information behavior as I comment on the flaws in the current educational system as they relate to the concept that binds as much as it separates teachers and students: information.

Before I begin, however, I must acknowledge the problems with the native/immigrant binary at the center of Prensky's influential work. Certainly, there are some students not interested in computer technologies, just as there are teachers who are not only heavy users but also early adopters of them. It might even be possible to refute the claim that students and teachers process information differently. In other words, teachers and students might not be as different as Prensky makes them out to be. Even if one is at odds with the terms "native" and "immigrant" or other aspects of Prensky's classifications, there seems little room for debate on his idea that students' familiarity, comfort, and proficiency with the "toys and tools of the digital age" are influencing in significant ways students' learning behaviors in the early twenty-first century. There might not be as clear a divide in the computer skills and thought processes of teachers and students as Prensky suggests, but there is in my opinion a divide that is fundamentally reshaping education in the digital age. I call this the digital information divide.

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