Natives and Immigrants: Closing the Digital Generation Gap

Edward T. Asbury

4.1 Introduction

A YouTube video was posted by the parent of a one-year-old in 2011, which featured the toddler playing with an iPad. The youngster smiles and laughs as she swipes her tiny fingers across the screen and makes the images magically disappear and morph into new ones. The parent then plays a cruel trick on the child. He swaps the tablet with a non-digital magazine. The magazine has just as many colorful images on the cover as the iPad, but the images do not change with a finger swipe. In just a few short moments, the toddler becomes visibly frustrated and upset. The father cleverly entitles the video, “A magazine is an iPad that does not work.” Perhaps an extreme example, but the one-minute video clip provides a brilliant illustration of how technology has fundamentally changed the way we see and interact with the world. The technology surrounding us continues to be a lever for the evolution of human behavior. In particular, Prensky (2001) described the resultant dissemination of technology to younger generations as the creation of “digital natives.” According to Prensky, the average young college graduate has spent an estimated 5,000 hours of reading in his or her lifetime. The same young adult reportedly has logged over 10,000 hours playing video games. You can double the last number for television-viewing, while computer games, email, Internet, and text messaging are not included. In essence, today’s native from a developed country will grow up immersed in the modern conveniences (and inconveniences) that digital “screen-based” technologies provide.

The foundation of this chapter is based on evidence that there are some differences between young and older users of technology. However, generational differences are often a result of goal-directed
behavior. Most of us use technology in varying degrees and for a variety of reasons. Although digital platforms continue to merge (we watch TV shows on our computers and surf the web on our TV sets), we will examine several types of screen-based technologies. As a result, we examine fundamental differences and some surprising similarities between digital natives and those of us who have been immigrants forced to learn much of the “language” we were not exposed to as children.

As children migrate into the school-age years, most already have some experience using computers and other screen-based technologies (e.g. tablets, smart phones, video games). In early grade school, children are creating digital presentations, searching for information on the Internet, and submitting school work online. Young and middle-aged adults use some form of screen-based technology every day. Cars now have built-in digital navigation systems and we can attend business meetings away from the office by Skyping from our laptops, tablets, and phones. Researchers examining the behavioral effects of screen-based technology usage often focus on the amount (quantity) of usage as the key predictor for behavioral outcomes. Perhaps the more important questions should revolve around the examination of what we are doing and how we are doing it. In turn, we will examine both content and contextual issues pertaining to computer-based screen-time for children and adults. While effective boundary management between online and offline behavior is optimal for good mental and physical health, we will conclude with a discussion about why we should be concerned about technology usage across the lifespan.

4.2 Natives versus immigrants

An exploration of the digital divide in relation to Information and Communication Technology (ICT) should focus on both the frequency and type of engagement that are the focus of online behavior. When we examine the frequency of ICT, there is little support for the idea that the young are more active than the old. In fact, there are recent challenges to the entire digital native versus digital immigrant dichotomy. Margaryan et al. (2011) argue that there is no reliable evidence that our youth uses technology more often than adults. Attrill (2015) suggests we can better understand Internet use, in particular, as being based on our goal-directed motivation. The native and immigrant constructs however, do remain useful as an age demographic frame of reference.

If we step back and examine the early research on Internet usage in the 1990s, the literature commonly describes a dichotomy of haves