

Chapter 13

Misconceptions About Being Digital

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ABSTRACT

Many academics have stated that the perceived decline in education is attributed to the change in the students themselves; that students today think differently, process information differently, and get bored with traditional schooling techniques; they are the digital generation. While the authors agree that technology such as electronic games provide a wealth of opportunities and are strong advocates of the use of these methods, they do not think that the digital generation learns any differently than previous generations, or children who have never been exposed to computing of any kind. Within this chapter the authors will expose the myth about today's media spoiled students and suggest how the creative mind can be captivated in both traditional and digital teaching environments. They will document several surveys and experiments, and highlight the success of teaching role-play classes face-to-face and in a constructivist digital environment.

INTRODUCTION

Academics have long been promoting a change in education to include technology-rich programs in the teaching curriculum (Papert, 1996; Rushkoff, 1996; Smith, Curtin & Newman, 1997); but they suggest that many teachers are feeling technically inadequate when teaching digitally literate students. These students have been called “the computer

generation” and referred to as “screenagers”. Many academics use the term “Nintendo Generation” and suggest that teachers, along with parents, are dealing with a new breed of learner. Other researchers (Green, Reid & Bigum, 1998) suggest a new breed of learner and believe that these children look upon school as an interruption in their computer usage time (Prensky, 2001; Squire, 2003); time they used for playing computer games, and that teaching institutions must use electronic media to re-package

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their course content to reach today's "digitally literate" students.

Much of this belief has been spawned from the notion that today's teenagers are "Digital Natives", having grown up in a digital world. However, other literature resources support the application of technology as a learning tool and also Game-Based Learning (GBL), yet refute the belief that this is because children grow up in a digital world as suggested by Prensky (2001), Gee (2003), Squire (2003), Shaffer (2006), and others. Take for an example the "Hole in the wall" project (Mitra & Rana, 2001). Computers were setup across India in locations that have never seen any type of technology before. No training or tuition was provided, yet these children were surfing the Internet within hours, downloading movies, using drawing software, playing video games, and even taught themselves how to cut, paste, and save their files. They collaborated with each other and worked in groups, they formed social groupings, and became highly motivated to continue to use this new available technology, all without supervision - all of the attributes Prensky and others suggests are only present in children that they refer to as digital natives.

Another example is the poverty alleviation project in Peru, set up by Dr. Logan Muller (Muller, 2004). The task of this project was to install computers in remote locations high in the Andes to provide access to information. These locations had no electricity and had never seen technology of any kind. With the help of solar powered generators and satellite Internet, computer systems were distributed to remote villages for farmers to access potential markets for the products. However, the local children were quick to utilize the computers, and often were assisting the older generation on how to use them. They collaborated, preferred multimedia applications, appeared to be goal orientated, and thus displayed all the traits of children who should have grown up playing computer games.

So are today's teenagers any different from previous generations and do they utilise technology as much as we believe? In fact, we questioned if they even preferred technology or was it just another form of entertainment. Were computer games and surfing the Internet serious activities or just a past time or a new toy? Are today's students digitally literate or is it that technology appeals to creative learners?

Within the following sections we provide a brief overview of number of interesting questions. An alternative approach based on number of surveys, several of them carried out by authors, is presented in the subsequent sections. The aim of this chapter is to provide reflections of how to orchestrate a challenging, enjoyable and effective learning experience that profits from students creative potential – with or without technology.

IS IT JUST A GAME?

In a survey completed in 1999 by Time and CNN (1999), questions were asked of a random group of 402 children between the ages of 13 and 17 years. Many played videogames, but most stated that although their parents knew about the content in the games, over half had no rules about the playing of them. We repeated this survey 7 years later and found that children in the same age group believe that not only their parents have less knowledge about the games they are playing, but they also have fewer rules about playing them. Yet many parents still advocate that violent computer games create violent people.

Based on the Table 1 (Kearney & Pivec, 2007c, p. 494) that compares the CNN pool from 1999 with the results of the repeated pool in 2006, 36% of parents don't have any knowledge about the games their children play (as opposed to only 10% in the earlier pool), and 67% of parents don't have any rules regarding the computer games (as opposed to 57% in the year 1999). The amount of

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