Computers & Education 77 (2014) 91–100

Contents lists available at ScienceDirect

Computers & Education

journal homepage: www.elsevier.com/locate/compedu

Digital learners and the overlapping of their personal and educational digital engagement

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ARTICLE INFO

Article history:
Received 12 February 2014
Received in revised form
13 April 2014
Accepted 15 April 2014
Available online 1 May 2014

Keywords:
Digital engagement
Digital natives
Learning ecologies
Digital learners

ABSTRACT

Current K-12 students are considered digital learners because technology is as pervasive in their academic world as in their personal lives. Technology enthusiasts argue that these learners are the "digital natives" having sophisticated technology knowledge and skills that can be potentially harnessed for better learning engagement inside the classroom. This phenomenological study investigates how some current high school students as the digital learners engage with technology at home and school; and how these two types of engagement overlap in their learning inside the classroom. Data were gathered from phenomenological three series in-depth interviews with five participants and also field observation. Findings show that the overlap between the personal and educational digital engagement(s) of these students was not necessarily positive as portrayed by the prevalent discourses of technology enthusiasts. The overlapping had mixed roles – facilitative as well as obstructive. Pedagogical and future research implications are discussed.

1. Introduction

Digital learners in US schools are commonly misunderstood because technology is as pervasive in their academic world as in their personal lives. Technology has penetrated every classroom in the United States (Rutledge, Duran, & Carroll-Miranda, 2007; Wells, Lewis, & Greene, 2006) impacting student engagement, learning, teaching, and achievement in multi-faceted ways. Technology has also been phenomenal in the lives of the digital learners (Pew Internet, 2013). The Pew Internet Research's report (2013) shows that 93% of teens have a computer or have access to one at home, 78% of teens have a cell phone, and 95% of teens consistently use the Internet. The new generation of digital learners are "surrounded" with and immersed by technology, often called the "digital natives" (Palfrey & Gasser, 2008; Prenksy, 2001, 2010). According to Prensky (2010), the digital natives naturally immerse themselves in digital technologies such as computers, cell phones, MP3 players, and videogames. Similarly, Tapscott (2009), referring them as the "Net Geners," states that they are the first generation to have grown up digital and "be bathed in bits" (p. 7), for whom "using the new technology is as natural as breathing" (p. 18). At the core of the digital natives discourse is that their personal use, innate-like digital skills, and proclivity for using technology can be easily utilized to forge meaningful learning engagement inside the various classroom settings (Palfrey & Gasser, 2008; Prensky, 2010).

However, portraying the current K-12 students as digital learners (i.e., as digital natives/Net Geners) is overly enthusiastic because it feeds into an idea of technological determinism – a dreamy viewpoint that technology provides solutions to historical problems of society, education, and student learning and achievement (Bennett & Maton, 2010; Kennedy, Judd, Dalgarnot, & Waycott, 2010; Selwyn, 2003, 2009; Smith, 1994). As result, there is a growing debate between the technology enthusiasts and skeptics (Collins & Halverson, 2009). Enthusiasts chart the "hope argument" (Hull & Nelson, 2005; Palfrey & Gasser, 2008; Tapscott, 2009) promoting the idea of harnessing the technological knowledge, skills, and attitudes of digital learners to better learn in the twenty-first century classrooms. These enthusiasts posit that teachers do not have to teach any new technology related skills for these learners, but merely integrate their existing knowledge and skills that they have developed through the personal use and experience of technology. In contrast, the skeptics (e.g., Openheimer, 2004; Selwyn,

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http://dx.doi.org/10.1016/j.compedu.2014.04.012
0360-1315/

2009) express the "fear argument," who see little, if any, the significance of highlighting the personal use of technology and the subsequent integration into classroom learning engagement. Although their personal use of technology is widespread, digital learners are not equipped with the types of academic skills that are essential for learning. Because so called digital learners are basic technology users having functional skills of game playing, social networking, texting, and surfing information on the Web, their learning engagement is limited lacking technology-mediated productivities such as self-created learning content, research skills, and using computers as cognitive tools (Jonassen, 2006; Livingstone, 2009; Luckin et al., 2009; Rowlands et al., 2008; Selwyn, 2009). In this bifurcated context, it is important to explore and understand how these digital learners engage in using technology for personal purposes at home and how their personal use might impact their learning engagement inside the classroom.

In this article, we present a phenomenological study that examines the intersections of personal and academic uses of technology by some digital learners across home and school settings. We explore the technology use of five "digital natives" students, who were attending a public alternative high school called South West Alternative High School (SWAHS) – a pseudonym – in order to see how they pursue their personal and educational digital engagement; and how these two types of engagement overlap. In this study, the term digital engagement is defined as the learning and everyday engagement of digital learners with technologies available in their learning ecologies including in their everyday life (e.g., home) and the learning contexts of the school. The study was guided by the two research questions stated below:

- How did the digital learners engage with technology for personal and educational purposes? How did their personal and educational digital engagement overlap with each other?

2. Digital learners as digital natives

Prensky, Tapscott, and others (e.g., Palfrey & Gasser, 2008) have created a popular discourse of the digital learners – "digital natives"/"Net Geners" – that has become highly influential in policymaking, teacher education and professional development, and in the educational technology field. Digital natives, Tapscott (2009) explains, naturally assimilate technology as "just another part of their environment," soaking it up "along with everything else" (p. 7). He further states that the digital natives "do not just observe; they participate," for which "They inquire, discuss, argue, play, shop, critique, investigate, ridicule, fantasize, seek, and inform" (p. 21). Central to the argument is that these digital learners bring wealth of everyday technological knowledge and skills from home that can be effectively harnessed for learning engagement inside the classroom (Oblinger & Oblinger, 2005; Palfrey & Gasser, 2008; Prensky, 2010). However, characterizing the new generation of students as digital learners and integrating technology into teaching and learning for these learners are concomitantly exciting (e.g., Oblinger & Oblinger, 2005; Prensky, 2010) and problematic (e.g., Bennett, Maton, & Kervin, 2008; Selwyn, 2009).

There are new and exciting teaching and learning opportunities generated by the affordances of new digital technologies such as mobile learning (M-Learning – learn wherever you go), ubiquitous learning (U-Learning – anytime, anywhere learning), one-to-one computing, collaborative learning with social media and Web 2.0, and massive online open courses. Adaptive to such technology-mediated teaching and learning opportunities, it is generally understood that the digital learners, who do not have to "translate or learn ICT, but merely experience it" (Nasah, DaCosta, Kinsell, & Seok, 2010, p. 532), can utilize technologies for having rich and meaningful learning experiences. Furthermore, digital learners are often perceived as more creative and for being constantly connected as they "live much of their lives online, without distinguishing between the online and offline" (Palfrey & Gasser, 2008, p. 4). This perception of creativity and connectedness seems rationale to the enthusiasts' hope argument that technologies can transform education by offering many new and previously unimagined pedagogical possibilities (Collins & Halverson, 2009; National Educational Technology Plan [NETP], 2010).

In contrast, technology integration and the whole discourse of digital learners are equally problematic. Digital learners lack many essential technology-related academic skills such that their learning engagement with digital tools and resources is limited, sporadic, and unspectacular (Livingstone, 2009; Selwyn, 2009). Their learning engagement is often limited to game playing, texting, and retrieving information from the Internet while little involvement in producing and sharing self-created content occurs (Luckin et al., 2009). They are mostly ordinary and basic users, who use emerging technologies (e.g., Web 2.0) less frequently, but use standard features of technology such as texting, social networking, and listening to music regularly (Caruso & Kvavik, 2005; Kennedy et al., 2010). Therefore, they lack an ability to effectively use the Internet and other emerging digital learning tools for academic purposes (Rowlands et al., 2008). This re-affirms the historical fact that despite the massive amount of time and money investment, technology has also become a cause of unspeakable anxiety and frustration engendered by the failure to meet the desired teaching and learning outcomes (Cuban, 2001; Kulik, 2003). So, the skeptics' fear argument seems plausible and that technology integration, including new digital technologies such as computers and the Internet, is doomed to failure as has happened in the past with the Educational Radio movement, television to support learning, and the teaching machine. This also reaffirms the skeptics' argument that the current portrayal of digital learners is generally misplaced technological and biological determinism because their digital engagement is often varied and far less than what it is expected from them (Bennett et al., 2008; Selwyn, 2009).

3. Home access to technology

Personal use of technology and the subsequent development of the digital skills of students are determined by their home access of technologies such as cell phones, computers, the Internet, as well as video and online games among others (Palfrey & Gasser, 2008; Tapscott, 2009). Home access to technologies also has multifaceted benefits for learning that it helps students for better educational outcomes (Fairlie, 2012) by providing them with increased opportunities for learning engagement through independent and personalized learning (Livingstone & Helsper, 2007; Roschelle, Pea, Hoadley, Gordon, & Means, 2000), increased motivation and study hours (Kerawalla & Crook, 2002; Kerawalla et al. 2007), acquiring information and communications technology (ICT) related skills and confidence (Kong & Kai, 2009), and even the development of some cognitive aspects in younger Pre-K children (Fish et al., 2008).

Studies show that the students' home access and experience with technologies (e.g., computers, the Internet, and video games) are found to be positively influential on how they develop technology fluency, build interest in taking formal technology-related courses, and generate