Exploring the Reading Experiences of High School Students on E-Book Reader

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ABSTRACT

Today’s ‘digital natives’ grew up in the age of network and digital devices. They have a completely different kind of cross-medium user experiences from the older generations. Understanding how the digital natives use e-book reader and their reading behavior will be an important issue for designing the next-generation e-book reader and mobile device. This study aims to explore how the introduction of e-book reader into high school campus influences the students’ learning and daily life. The authors found that e-book reader does help the students to develop a habit of mobile reading. Its effect exceeds our expectation of achieving digital learning. Using e-book reader, students engaged in creating new form of digital contents and became active in peer-sharing activities. Thus, they propose that when new curricula are designed, user experience with the e-book reader can be taken into account in order to maximize the potential of using the e-book reader in education.

Keywords: Digital Learning, E-Book Reader, Mobile Reading, New Literacies, User Experiences, User Log Analysis

INTRODUCTION

Rapid development of information and communication technologies has brought about fast-paced changes of life styles in contemporary society. The inventions and uses of mobile devices such as cell phones and e-book readers (e-reader, for short) not only altered the ways by which people communicate and obtain information but also made our daily life becoming increasingly dependent on mobile technologies. This is particularly the case for the ‘digital natives’ – a younger generation of people growing up fully immersed in the advent
of digital technologies and computer networks. Their proficiency with multiple media endows them a unique and completely different set of cross-medium user experiences that could not have existed for the earlier generations (Kress, 2003; Selbar, 2004; Tapscott, 2008). Using e-readers, the digital natives certainly are not duplicating or reenacting their paper-reading predecessors’ experiences.

How do we understand the digital natives’ reading behaviors and other activities associated with the use of e-readers? This will be an important issue in designing new e-readers and other mobile devices. On the other hand, how do the emergence and propagation of new communication technologies influence the learning activities of the younger generation? How can we help to improve their new literacies in the digital era? These are the questions that concern many pedagogists (Lankshear & Knobel, 2006; Livingstone, Van Couvering, & Thumim, 2008). Considering these issues, we sought to bring the increasingly popular e-readers from the commercial market into the high school campus. In doing so, we hope to explore the potential of digital learning and to take this opportunity to see how this new technological development influences the reading behaviors and other aspects of daily life experiences among the young generation.

In this study, we distributed experimental e-readers to a class of senior high school students and their teachers for using the e-reader as a study aid. Students were also encouraged to carry the reader with them so that they can use it outside the classroom, at home or during commute. During the five-month period of experiment, user behavior data were logged, collected, and analyzed. We documented changes in the users’ e-book reading behavior during the course of experiment, corresponding to progressive stages of growing familiarity and comfort with using the machine. By doing so, we hope to understand how the use of e-reader influences the students’ learning and daily life.

The experience of using a mobile device is universal to today’s society, but it is also uniquely personal in many aspects, including that of body, feeling, psychology and society. Thus, only when multiple approaches to the subject are contrasted and integrated, one can gain a deeper understanding of the new user experience with contemporary communication technologies (Haddon, 2005; Li & Cheng, 2011). In this study, we attempt to combine qualitative methods and informational technologies to develop a new methodological framework for analyzing the new user experiences. On one hand, the user log was collected from the e-reader. On the other hand, we conducted a long-term ethnographical observation of the user community, both on-line and off-line, and held a focus group interview to understand the users’ daily-life activities and to interpret the recorded user log in its context. Ultimately, by correlating the objective e-book usage data with the user’s subjective life experience, we hope to understand how mobile devices catalyze transformation of body, technology and life contexts in contemporary society.

DIGITAL READING AND MOBILE DEVICE

Digital reading is not without a history. As soon as personal computer has become a commodity in the last century, people started to read on-screen and on-line, and the contents quickly expanded beyond traditional texts toward hypertext, images, video, etc. Previous study of digital reading mostly focused on how computer screen differs from traditional printed paper in their styles of presentation and in the experiences they brought to the readers (Dillon, 1992; Dyson, 2004; Hillesund, 2005). Mangen (2008) observed that reading via digital media is dominated by shallow reading, in which scanning and skimming are commonplace. This is particularly the case for reading hypertext on-line. The ability to ‘click’ and interact with the hypertext distracts readers from engaging immersive reading. Liu (2005) also arrived at a similar conclusion. It was found that people spent more time browsing, scanning, and keyword spotting when reading on-line. Furthermore, they read in a selective and non-linear manner and were less attentive and engaging.
Mapping Out Scientists' Messages: Models that Support Collaborative Critical Thinking
Annette deCharon (2014). Teaching Cases Collection (pp. 466-493).
www.igi-global.com/chapter/mapping-out-scientists-messages/107148?camid=4v1a