Chapter 5.17

"Stay Out of the Way! My Kid is Video Blogging Through a Phone!"
A Lesson Learned from Math Tutoring Social Media for Children in Underserved Communities

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ABSTRACT

The current trends in social network media, coupled with increasingly advanced and ubiquitous mobile technology point towards great potential for their use in learning support and an emerging possibility of "deconstructing digital divide." This paper explores a mobile video blogging model embedded in a learning support community as a means of addressing learning needs among underperforming students of low socioeconomic status. In this study, various mobile video recording approaches were analyzed and some blogging strategies were linked to higher learning outcomes. Although a few challenges and issues were identified, the mobile video blogging community was generally found to be a viable learning support model for children in underserved communities.

INTRODUCTION

In recent years, mobile devices such as smart phones, personal digital assistants (PDAs) and ultra mobile or tablet PCs have garnered significant interest from educators because of their increasing computing power, portability, affordability, and ubiquitous accessibility. M-learning (mobile learning), as a promising education model to promote and support adaptive, investigative, communicative, collaborative, and experiential learning activities, proposes a wide variety of interactive learning environments in which teaching and learning can thrive (Laurillard, 2007).

Particularly, today's smartphones are mini multimedia computers. They are generally equipped with 3G and WiFi internet connectivity and also at least a multi-megapixel camera and Bluetooth for wireless peripheral device interconnectivity. The smartphones, with digital media storage at a gigabyte level can capture or play back most standard audio, image, and video formats. Embedded sensors such as accelerometer, compass, and GPS generate and enable a whole new set of creative media and interaction possibilities integrated into online media and social networking sites. Therefore, the ubiquitous mobile connection to exponentially growing Web 2.0 social media services (e.g., Flickr, YouTube, blogs, MySpace, Facebook, Kyte, GPS storyteller, etc.) and collaborative communication and user generated content creation capabilities of these mobile devices make them versatile learning resources for facilitating constructivist learning environments across multiple learning contexts (Cochrane, 2008).

At the same time, with the rapid advancement of mobile computing and Web communication technology, perhaps a new possibility for deconstructing the digital divide in schools may be emerging. Warschauer et al. (2004) argued that the social embeddedness of technology is fertile ground for technology-based innovation in schools to flourish. He further claimed that a simple comparison of student-computer ratios at schools may not adequately depict the problem of digital divide between schools in high-income districts and schools in low-income communities. What seems to be more important is gauging the level of ubiquitous accessibility of computing power and Internet access coupled with an adequate level of support for academic activities in school as well as at home. Therefore, finding a technology model that may ignite high degrees of ubiquitous accessibility and thereby foster learning in school and everywhere else has become our utmost concern.

Recognizing the importance of access to information technology in mitigating the societal gaps, the National Telecommunications and Information Administration (NTIA) division of the US Department of Commerce has published vital data related to the status of the digital divide (Dutta-Bergman, 2005). This report has also promoted the availability of publically accessible computers connected to the Internet (Dutta-Bergman, 2005). However, traveling to libraries or community centers and signing up to access computers and the Internet is hardly more effective than owning and using a personal smartphone. In the age of the Web 2.0, such a device can be equipped with various inquiry tools and online communities of resources to enable autonomous learning opportunities profoundly weaved into daily lives and routines.

This paper explores the potential of a specific mobile Web 2.0 tool--video blogging-embedded in a learning support community, as a means of addressing learning needs among underperforming students of low socioeconomic status. It describes a qualitative study implemented with 5th grade students in an elementary school and discusses the observations and lessons learned.

BACKGROUND

Blogging. Among many Web 2.0 tools, blogging for teaching and learning has been gaining much momentum amongst educators (Educause, 2005).

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