Chapter 34
Recognizing Value of Mobile Device for Learning

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ABSTRACT

This study defines a mobile device as a contemporary learning tool and learning environment and focuses on the factors' influencing on users' perceptions of mobile learning and the characteristics of informal learning available for a use of mobile device for learning. The major findings are the following: First, the longer participants are engaged with mobile device, the more they will view that mobile device as valuable for learning. Next, whoever defines knowledge in a broader sense expects to use mobile devices longer time and in turn see the value of that device for learning more positively. Users' initial learning-related perception seems to influence their recognition and behavior toward mobile learning. Lastly, participants' major learning activities are self-directed while incidental learning is also meaningfully recognized. Participants' recognition of incidental learning can predict one's recognition of the value of mobile devices for learning.

INTRODUCTION

Ongoing technological advancements in Information and Communication Technology (ICT) have created new possibilities for people to connect and interact. Advanced mobile devices represented by 'smartphones', for example, have been a social phenomenon for the past several years, and their features have been combined with the latest development in ICT. Nielsen reports that just over half (50.4%) of US mobile device own-

ers have some type of smartphones, the current representative mobile device technology (Fingas, 2012). In Korea, one of the IT powerhouses and the first country to pass 100% wireless penetration, the number of smartphone users has continued to grow, surpassing 30 million in mid-August of 2012 (Hyun, 2012). That statistis equates to about 60% of 'smartphone' subscribers. The International Data Corporation (IDC)'s Worldwide Quarterly Mobile device Tracker indicated that total smartphone shipment volumes reached 491.4 million

units in 2011(IDC, 2011). That figure will likely double to 982 million by the end of 2015 (Mobile DeviceTechNews, 2011).

With this huge spread of mobile device technologies, educators and researchers have become aware of how mobile devices can be utilized as a meaningful tool for learning and teaching. The use of mobile device, handheld, and portable devices has increased across every sector of education (Traxler, 2007). Learning with mobile devices is reminiscent of a well-known model as for selecting instructional media, SECTIONS (Bates, 1995; Ledford, 2006). SECTIONS refers to S for Students, E for Easy of Use, C for Cost, T for Teaching and Learning, I for Interactivity, O for Organizational issues, N for Novelty, and S for Speed. Explicitly, mobile devices are carried every day by students, offer relatively affordable pricing with easy use and high interactivity possibilities. It is relatively new and speedy. Indeed, Traxler (2007) determined that mobile device technology can be a most effective and engaging environment for teaching and learning.

Learning via a mobile device is now called mobile learning and viewed as an immediate descendant of e-learning (Laouris & Eteokleous, 2011). Pinkward et al. (2003) defined mobile learning as e-learning that uses mobile devices and wireless transmission. Georgiev and colleagues (2004) defined mobile learning as a new stage of digital learning that use mobile devices, such as personal digital assistants (PDAs), mobile devices, and tablet PCs, that deliver the same set of functionalities. The usage of mobile devices can also contribute to creating noble patterns of communication and thus facilitate social learning (Liu & Kao, 2007; Zurita & Nussbaum, 2004). Mobile device's high mobility and spontaneity offer learners a resourceful environment that is interactive, connected, and personalized. The essence of mobile device-learning is to offer individualized and immediate supports and resources during the actual learning process to let learners actively explore ideas, advance understanding, and build their own learning. Mobile device for learning can provide the opportunity to gain more experience and skills for independent learners who are placed in charge of their own learning.

Although mobile learning has been an issue in the education field, most research studies thus far have attempted to conceptualize its meaning by focusing on its technical capability, for example mobility and spontaneity (Thornton & Houser, 2005). A series of research studies identified the nature of mobile device user interaction with mobile device to intensify learning (Thornton & Houser, 2005). Their studies emphasized that mobile learning's interactive feature that cab 'push media' to deliver the lessons and vocabulary through SMS was effective in promoting learner attitudes and learning achievement. Another study discovered mobile device's possibility for Ubiquitous Learning (Liu & Milrad, 2010). Further, mobile learning's effectiveness and potential for a specific domain, such as language learning, have been heavily studied in relation to mobile device's characteristics promoting interactivity, immediacy, and communication (Thornton & Houser, 2005; Wong et al., 2010).

Yet, this study is interested in identifying some factors influencing users recognizing the value of mobile device for learning; as we hypothesize that the benefits of mobile learning can only be maximized based on how much individuals are ready and perceive their mobile devices as a learning tool. In addition, as the main attributes of mobile learning are positioned in informal learning rather than formal learning (Traxler, 2007), this study aims to capture what types of informal learning appear through mobile device for learning. Defining 'mobile device' as a representation of 'smartphone' devices, overall, the research questions for this study are:

1. Which factors influence participants' recognition value of mobile device for learning?

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