Investigation of Student Learning Assistance through Online Academic Help-Seeking and a Mobile Application: A Quasi-Experimental Approach

Chia-Wen Tsai, Department of Information Management, Ming Chuan University, Taipei, Taiwan

Pei-Di Shen, Teacher Education Center, Ming Chuan University, Taipei, Taiwan

Ya-Ting Fan, Department of Information Management, Ming Chuan University, Taipei, Taiwan

ABSTRACT

In order to enhance students’ learning performance, this study adopted online academic help-seeking and a mobile application (APP) to investigate whether they could help to improve students’ learning. An experiment was conducted in a course of ‘Applied Information Technology: Office Software’ with 100 students as the subjects; students were interviewed, and data on learning effects was collected and analyzed. Facebook was used as the platform for online academic help-seeking for the students. In addition, the researchers designed an APP for the purpose of helping students to learn through content presented on their mobile phones. Based on the findings in this study, the online academic help-seeking is helpful in developing students’ computing skills. However, contrary to expectations, the APP did not result in better development of students’ computing skills in this study.

Keywords: Blended Learning, Computing Skills, Mobile Application (APP), Online Academic Help-Seeking

1. INTRODUCTION

With the emergence of smart phones in society, there is a large growth in the use of smart phones, especially among the youth (Salehan & Negahban, 2013). In addition, due to the easy-to-carry feature of smart phones and the improvements in operation and processing functions, users can handle their business and everyday af-
fairs immediately with a smart phone and wireless Internet service. It is stated that students are driving the adoption of mobile computing devices, such as smart phones and tablet computers, in universities. In addition, 67% of surveyed students believe these mobile devices are critical for their academic success and use their devices for academic activities (ECAR, 2012; Gikas & Grant, 2013). Therefore, this study designed a mobile application (APP) to be used for a university computing software course. With the feature of integrated information in this APP, it was expected that students could easily access and learn from the digital learning materials, thus improving their learning.

When a student graduates from high school and enters university, she/he has to face more complex and challenging courses (Karabenick, 2003). In the traditional environment of a classroom, a teacher has to teach multiple students, thus one-on-one explanation is not possible. Students may have some negative emotional responses if their need for help is made public. Thus, when students encounter difficulties in learning, they tend to avoid seeking further illustrations (Cheng, Liang, & Tsai, 2013). Also, during the period between one class and the next one, students may not actively reflect and think about what they have learned in the class. During a class, students often do not want to ask questions as they think this action may influence their teacher’s teaching schedule and cause delay. As a result, during class, rather few students may actively ask questions if they are confused about something related to what is taught in the class (Schworm & Gruber, 2012).

However, due to the popularity of Internet, people with the same interest, or classmates, may form a small group through an online platform and exchange information on that platform from time to time (Ridings, Gefen, & Arinze, 2002). The social behavior of creating a social network with social functions, information, sense of belonging, and sense of social identity through a website can facilitate communications (Wellman, 1996). For example, Facebook is not only a social network site for people to exchange information, but also a channel for students to look for solutions without burden. In Cheng and Tsai’s (2011) study, it is found that university students do not avoid looking for help online for their schoolwork, and when they encounter schoolwork-related problems they prefer to search for answers on the Internet. Especially, students in online courses with an online academic help-seeking function are more likely to seek help through an unofficial online channel (Cheng & Tsai, 2011). Therefore, this research included online academic help-seeking in a blended course as a channel for students to seek help, and further improve their learning.

Nowadays, it is very common to use computers and software at work. Thus, skills of using them have become very important in the workplace (Tsai, 2010). This phenomenon has been observed in various developed countries, not just in Taiwan. In these countries, graduates are expected to have skills required for word processing using a computer. Thus, many enterprises hope that colleges and universities have computer-related courses in order to improve students’ computer knowledge.
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Carla Ruiz-Mafé, Silvia Sanz-Blas and José Martí-Parreño (2013). *Teaching Cases Collection* (pp. 109-146).
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