Chapter 7

Self-Directed Learning With Technology and Academic Motivation as Predictors of Tablet PC Acceptance

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ABSTRACT

In this study, it has been attempted to examine the role of self-directed learning with technology and academic motivation in students’ status of tablet PC acceptance at a high school where each student’s processes of classroom and out of class learning are tried to be supported upon delivery of tablets to each student. The participants of the research have been consisted of 310 high school students. The data of the research has been obtained with use of questionnaire questions developed by the researchers, the tablet PC acceptance scale, self-directed learning with technology scale and the academic motivation scale. The structural equation modelling has been made use of data analysis. Research findings have shown that self-directed learning with technology and academic motivation were in turn effective in students’ tablet PC acceptance. Some suggestions have been made for students, teachers and administrators in the light of findings of the research.

INTRODUCTION

Mobile and wireless technologies have begun to have a key role in today’s processes of education and training. Developments in information and communication technologies (ICT) and their reflection in education has come up with concepts of learning every time and everywhere and in addition to this, limits of education in classroom has started to widen. Learners have started to have access to learning
materials, their teachers and their peers at any time and place desired especially upon dissemination of personal mobile devices. As a result of this, the interactions student to student, student to teacher, student to learning content in classroom have been sustained even out of classroom (Karaoglan Yilmaz, 2017; Sharples, Arnedillo-Sánchez, Milrad, & Vavoula, 2009).

The significance of mobile learning has increased more day after day since it widens and enriches the scope of learning activities. Not only does the use of mobile tools in educational context contribute the access to learning contents and materials from out of class, but it also contributes to supporting classroom learning activities. Students have been able to keep in touch with one another, have access to information sources, share information and carry out cooperative learning activities with help of mobile devices and wireless technologies that they’ve owned. Hence the social configuration of the information is also realized (Yilmaz, 2016; Karaoglan Yilmaz, & Kilic Cakmak, 2017). The fact that mobile devices are portable and they’re able to present possibility of access to information when desired, gives the learner the freedom to be wherever he wants, and also learn in accordance with his own speed and needs of learning. In this way, mobile devices has affected learning in socio-cultural and cognitive terms (Pachler, 2009).

Nowadays, one of the mobile devices which have been started to be preferred on occasions of education are tablets. A tablet taken as a laptop computer that enables the user to enter directly input into screen by using a tablet pen, also gives opportunity to mouse and keyboard input. As well as its capacity of making up a perfect platform so as to draw and write, tablet may also be used for teaching (Horzum, Ozturk, Bektas, Gungoren, & Cakir, 2014). In contrast to other mediums, it is easier to write and erase in a tablet and students can easily save all of the content in the tablet when they want to have a sample of the content (Gill, 2007, Cited by Horzum, Ozturk, Bektas, Gungoren, & Cakir, 2014). Although tablets have been supplied with numerous benefits in terms of learning processes and applications, it is very crucial that learners should have skills of self-directed learning with technology in taking advantage of these devices. Pintrich’s (2000) defined the self-directed learning as an effective and constructivist process that learners go into in which they deal with observing, managing and controlling their cognitions, motives and behaviours upon having formed their aims and also in which they are guided by their own aims and learning medium they’re in. As for self-directed learning with technology, it can be taken as a process in which learners use technology as an instrument in the course of self-directed learning and they support this process by using technology (Demir & Yurdugul, 2013; Teo, Tan, Lee, Chai, & Koh, 2010). With the increase of mobile learning tendency in K12 education, the effects of self-directed learning with technology on child students have started to attract more attention and it has been an obligatory skill for students asking for personal development (Demir, Yasar, Sert, & Yurdugul, 2014; Song & Hill, 2007; Yurdugul & Sarikaya, 2013; Yurdugul & Demir, in press).

Mobile learning requires, in terms of learners, more effort, orientation, motivation and self-motivated control. Thus, it has been stated in the study that learners with self-motivated learning skills are able to manage their processes of learning batter in accordance with their needs and speed of learning, and they have a better skill of control on their own learning process, making them spend their learning course more efficiently (Lin & Hsieh, 2001). On the other hand; it has been stated that learners with undeveloped self-motivated learning skills fail in these kinds of learning mediums and leave them on account of the fact that they don’t know about the necessities required by online learning mediums and aren’t able to manage this learning process well (Oladoko, 2006). Therefore, students who want to be included in the processes of mobile learning need to have skills of self-directed learning with technology so as to succeed in these mediums (Demir, Yasar, Sert, & Yurdugul, 2014; Yurdugul & Sarikaya,