Chapter 5

Students’ Acceptance and Use of Interactive Whiteboard

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ABSTRACT

The aim of this research is to examine the acceptance and use of interactive whiteboards among universities students. The research implements a hierarchical regression for statistics analysis over sample of research consists of 204 respondents, who have participated voluntarily for research purposes. The results show that performance expectancy, effort expectancy, and social influence positively effecting the behavioral intention. However, facilitating condition has negative impact on the acceptance of interactive whiteboard. University management and lecturers may gain further understanding and knowledge about the interactive whiteboard towards students. The results also provide insights for university management in improving the knowledge of students by giving more guidance, learning process and more practice of the usage during classes and presentations to improve the students understanding and make them learn more so it will benefit them in their future.

INTRODUCTION

Technology development gives a great impact in people life. Many countries such as United States, Australia, Netherlands, United Kingdom and Mexico undertake a large budget to integrate technology into the education environment (Tosuntas, Karadag, & Orhan, 2015) as education is important to produce knowledgeable and competitive nations. Programs like International Standards for Technology in

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Information and communication technology (ICT) in education is widely used for current learning (Balta & Duran, 2015). The most promising revolutions in technology is interactive whiteboard which include components such as computers, projector and board (Kung-Teck, Sharon, & Janet, 2012) Students can use these technologies more often and easy to use by them to do drawing or formulas. Interactive whiteboard can be used to distribute the instruction to the students efficiently. The used of the interactive whiteboard in classrooms contributes to the learning process that will improved students’ performance on every subject.

Interactive or smart whiteboard is equipment that is designed to assist businesses and plays an important role in education system. Interactive touch pen and a panel with an active surface of software or hardware, computer, projector and board are examples of interactive whiteboard equipment. Moreover, by using the touch panel on the computer screen for a project, usually the images are replicated and the computer is used to control directly and easily by touching the board. Interactive whiteboards have given teachers the opportunity to use many new types of teaching and learning activities in the classroom (Türel, 2011). For example, interactive whiteboard provides faster and easier method by using few types of course materials such as shapes, pictures, sketches, methods, which enabled students to recognize and attach with their subjects. Interactive whiteboard helps students to arrange various type of multimedia files, preparing presentations, making videos by including visuals, cartoons and font size of texts, drag-and-drop type of applications and others.

Turel and Johnson (2012) suggests that educational institutions can provide better learning environment with the latest technology by using interactive whiteboards as it has been used in many contexts in various ways that promises advantages in terms of learning for students. Interactive whiteboards that teachers use in teaching give students more convenience to integrate in learning environment. Furthermore, it reduces students’ workloads and increases active participation among them so that they can be part of the process rather than simply become the recipients of prepared knowledge Tosuntas et al. (2015). Students would be more motivated to learn because they can understand better through a reflection and creative ways that attract their attention which enable effective retention in class. In fact, students can understand better when they are involved in a discussion, which is the best way to communicate with students.

Teachers and students who are situated in a distinctive control and instructive level, may achieve more positive outcomes by using interactive whiteboards. Interactive Whiteboards have been implemented for over a decade at schools in United Kingdom. Interactive whiteboards engage students in the lesson content as they are being used as a complimentary tool to enhance the learning process. Students assume that instruction with interactive whiteboard is reasonable, commercial, wholesome and beneficial, interactive whiteboard graphical presentation is better, grant the use of multi-media and edge to better education.

Interactive whiteboard has many benefits but it would not be enough and efficient by just knowing its benefits without understanding and learning the process and ways of using it. Even though it is a newly developed technology that make learning and teaching tasks more easily but there are also challenges arise due to lack of knowledge in handling the instrument. It is important for teachers to guide and properly