

# Chapter 81

## Students' Attitudes towards the Use of Technology in Hong Kong

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### ABSTRACT

*Since the Education Bureau of Hong Kong encouraged the use of technology in education, virtual learning platform and PowerPoint slides have become magic tools for teaching and learning across all subjects in schools, colleges, and institutions. However, is technology a magic tool for effective teaching and learning? In order to understand how students think of learning with technology, this chapter investigates 114 college students' attitudes towards learning with technology imposed by the school and teachers through questionnaires. The results reveal that students had positive attitudes towards the use of technology in the affective, cognitive, and behaviour domains. Most importantly, they attributed their success of learning to what the teacher did with technology as well as what the teacher did in the classroom. These findings reveal that technology is not only a good tool to support learning but also fosters the acquisition and application of students' subject knowledge.*

### INTRODUCTION

Since Education Bureau (Hong Kong) encouraged teachers to use information and communication technology for teaching and learning in the late 20<sup>th</sup> century, there has been a 'revolutionary' movement in various schools and tertiary institutions. Teachers in Hong Kong were required to take training courses for using technology for teaching. Administrators were requested to introduce virtual learning platforms to schools and tertiary

institutions. Various kinds of funding for the application of technology were given to encourage the use of technology for teaching and learning. Facing these sudden expectations and requirements, teachers had no choice but to learn the use of software and upload learning materials to the virtual platform. Suddenly, no matter what subject teachers taught, they were busy with designing the PowerPoint slides and uploading teaching & learning materials into the platform. However, "the pressure to reform education through technol-

ogy integration and the emphasis on developing information literacy skills for students implies the need for an understanding of current computer technology integration practices to support student learning” (Keengwe, 2007, p. 11). And we cannot assume that when technology tools become available, teachers necessarily embrace and use them for teaching and learning. Instead, the key to the successful use of the tools to enhance student learning lies in the design and implementation of learning activities rather than the machines and applications themselves (Strudler, 2003).

To nurture proper concept of the use of technology, I think we should start with the effective use of technology in teaching and learning, especially from the students' point of view. Knight and Waxman (1991) specifically encouraged the importance of examining students' attitudes towards teachers' instructional knowledge because teaching and learning can be improved by understanding how students view and interpret the instructions given by the teacher. Therefore, this study aims to investigate 114 college students' attitudes towards learning with technology imposed by the school and teachers through questionnaires. While teachers have integrated various kinds of technologies, online tools, devices or course management systems into teaching, it is important to know how students view all of these teachers' instruction. In addition, the goal of the study was to find out what kind of technology (i.e., computers/tablets, mobile and the Web) students like and dislike so as to help teachers develop and design effective learning activities with the use of the tools.

## **BACKGROUND**

Technology pervades everywhere. Students use computers, tablets and mobile phones in various places including home and colleges. Educators, unavoidably, use various kinds of technology into teaching and learning. In addition to the use of software (i.e., Microsoft Word and PowerPoint),

virtual learning platform, computers and the Internet, mobile learning and Weblog have also become a trend in education nowadays. Over the past decade, educational administrators have pushed towards the use of technology into teaching and learning. In order to understand whether technology can really support student learning, it's important to study students' attitudes towards the use of technology. Knight and Waxman (1991) state that research on learning environment puts emphasis on the paradigm of student cognition, which values the ways that students perceive and react to their learning tasks.

While many teachers and educators are trying to integrate the technology into teaching and learning, there are studies of students' attitudes towards the role of technology in teaching and learning. For instance, Oliver (2002) investigated the role of technology in higher education in the 21st century and concluded that Information and Communication Technology (ICT) offers a student-centered learning and supports in knowledge construction. The study conducted by Saunders & Pincas (2004) about the student's attitude towards ICTs in teaching and learning indicated that the students believed that ICT has a significant role to play in supporting and enhancing their university learning experience and they viewed the use of ICT as potentially going beyond the use of the Web to search for resources and the use of email to communicate with others. Another study done by Zakaria, Watson and Edwards (2010) on the use of Web 2.0 technology showed that students preferred using e-mail to disseminate and share digital contents. When they searched for information for their studies, they also preferred to use search engines instead of asking friends or teachers. The study conducted by Fortune, Spielman and Pangelinan (2011) on the students' perceptions of online or face-to-face learning reflected that the subjects were able to develop, grow and be creative when they learn in a high technology environment with little or no physical contact. The study done by Ashong and Commander (2012) also indicated

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