Chapter 12
Comparing Learning Styles and Technology Acceptance of Two Culturally Different Groups of Students

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ABSTRACT

This chapter reports on a study that compares the learning styles and technology acceptance of two culturally different groups of students studying at different universities, one in Australia and the other in the US. However, almost all of the students from the Australian cohort were international students from China; thus, this study is essentially a comparison between American and Chinese students. Felder-Solomon’s Index of Learning Styles (ILS) was used to collect learning styles data while Davis’ Technology Acceptance Model (TAM) was used to examine the acceptance of Twitter, the technology being examined. The study results revealed no statistical significant differences in the learning style preferences of the two groups suggesting that culture did not play a significant role in defining their learning habits. However, culture was a significant factor in the acceptance of technology, in this case Twitter.

INTRODUCTION

Learning styles are important to be understood by the educators to make sure that intended learning outcomes are achieved. This is important especially in multicultural settings where different learning styles can co-exist and standard teaching approaches may not apply well to all students. There have been many studies showing that even well prepared lectures do meet with failure due to mismatch between style of instruction and diverse group of students. Student backgrounds and cul-

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ture have been thought to play an important role in forming instructions in deciding the learning outcomes and certainly learning experiences. Gathering information on learning styles of all students before teaching and organising appropriate learning and teaching activities for each student is a mammoth task almost impossible to be achieved despite the well documented benefits. Studies have shown that there are distinct differences between students from different cultures and the learning styles they inherit. A thorough review of the learning styles has been previously done in (Coffield, Moseley, Hall, & Ecclestone, 2004a, 2004b). The association of culture and learning styles has been seen in many literatures. Guarnaccia & Rodriguez (1996) noted that high power distance cultures (like China) have greater difference in the inequality among students and teachers. In Chinese cultures, a teacher is seen as the initiator of all communication and it is a norm that students only speak when asked to. This is in contrast to Western norms and culture. Understanding this difference could help avoid disastrous class experiences. Given the increasing number of international students and the increased uptake in online education, understanding of learning styles might become more important than before as Australia prepares its education industry for the next decade. This understanding could allow educators to exploit students’ strength and help them in their learning journey. This study is therefore aligned along this interest. However, there have been a limited number of studies comparing learning styles of students from various countries. This study has been motivated by this factor and thus is designed to compare the learning styles of two groups of students who were engaged in a collaborative project, one from Swinburne University of Technology in Australia and the other from Southern Polytechnic State University in the US.

On the other hand, the growing usage of social media in many facets of academia is undeniable. Micro-blogging is one such phenomenon which has been a key feature in the suite of Web 2.0 technologies. Originating from blog, micro-blogging is just smaller in size and normally posted by one person and is in reverse chronological order. The key features of micro-blogging seem to suit academia filling the void created by traditional class discussions and existing learning management systems which lack social presence as mentioned by Dunlap & Lowenthal (2009). Notably, ease of posting, brevity (up to 140 characters in the case of Twitter), the ability to include abbreviated hypertext links, and mobility with which such posts can be made are some of the key benefits of micro-blogging. Twitter (a popular micro-blogging service), for instance, allows posting via Short Messaging Service (SMS), mobile computing devices such as smart phones and tablets, instant messaging (IM) services, and email among others. These are all in addition to a conventional Web-based interface and custom application software.

Apart from varying student and educator IT literacy, social media exposure and culture differences are apparent contributing factors in deciding Twitter adoption for academic purposes. Twitter, though a popular communication medium across many parts of the world isn’t available everywhere. Countries like China, Iran and a few more has restricted or has almost made Twitter non-existent due to political reasons. The increased acceptance of social media usage at universities in Australia has bridged some of these restrictions alongside the usage in smart phones and tablet computing. Steady flow of international students from these Twitter-restricted countries and poorer nations has exposed many students to a new approach towards learning by using Twitter. However, cultural differences can lead to different adoption and learning outcome as shown in numerous IS-related studies. As an educator, it is important to understand these differences prior to adopting a technology for academic purposes especially if assessments are involved. Social media forums could sometimes pose as a threat to the intended objective by derailing the discussions or unknow-