

Chapter 31

Using a Social Learning Community to Actively Engage Students' Participation in a Virtual Classroom

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EXECUTIVE SUMMARY

This case describes an experiment to motivate first year university students to use a virtual classroom through social and academic interactions. This approach augments the virtual classroom approach with concepts from social networking to create a social virtual classroom. The aim of the approach taken was to determine if social media included in a virtual classroom can actively engage students' participation in social networking as well as be used as a tool for learning. Results from the experiment indicate that using a social virtual classroom encouraged social networking among the students. The social virtual classroom was also highly used for learning. The blend of social and academic in the virtual classroom engaged the students in creative ways that was not anticipated. A survey was conducted at the end and seventy-seven percent of the students agreed that the social aspect of the virtual classroom was intrinsically motivating.

ORGANIZATION BACKGROUND

The University of Trinidad and Tobago (UTT) is a government owned university. UTT is a multi-campus facility with six major campuses offering certificates to post graduate degrees. The campus

this experiment was conducted was at the Point Lisas Campus. UTT was established from a government owned institute, the Trinidad and Tobago Institute of Technology (TTIT). UTT's primary focus is to meet the needs of Trinidad and Tobago for a highly trained and qualified technological manpower base. UTT started in 2005 and offers a spectrum of educational opportunities where

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experiential learning programmes are incorporated into the traditional learning environment.

The vision of UTT is to be the National Institution of higher learning and research for socio-economic and technological development that:

1. Inculcates in the graduates a set of over-arching skills—metaskills—that help them navigate the new and emerging technologies in the national and global contexts, and
2. Through its R & D activities, brings and keeps Trinidad and Tobago in the Vanguard of engineering and technology in niche areas of key importance, such as natural gas is to the nation.

The mission of UTT is to be an entrepreneurial university designed to discover and develop entrepreneurs, commercialise research and development, and spawn companies for wealth generation and sustainable job creation towards the equitable enhancement of the quality of life of all individuals, families and communities of the Republic of Trinidad and Tobago and the Caribbean.

SETTING THE STAGE

Introduction

The experiment described in this case investigates whether using social networking software to build a virtual learning community can actively engage students' participation in social networking as well as be used as a tool to support learning. Previously, an experiment was conducted by the author to study the effects of using technology in the teaching of a first year mathematics course at the UTT. In this experiment, a virtual classroom was introduced that made heavy use of *blogs* (Mohan, 2008a). This virtual classroom was used as a tool to enable students to explore, discover, extract, and share their knowledge with other students who were then able to build upon

and refine their knowledge. In effect, the virtual classroom supported the growth of a learning community where students could express their thoughts and get feedback from the instructor and other students.

The virtual classroom was used for two years with each year comprising of three samples of students from mechanical, chemical and petroleum 1st engineering students (65 students, 94 students). As an incentive, the students were given 10% of their final marks based on their participation in the virtual classroom. The instructor also used innovative techniques such as posting reflective questions rather than questions with calculated answers to actively engage the students who used the virtual classroom. The results of the experiment are reported in Mohan (2008a). The number of students who passed the final examination increased from 43% to 67%. Approximately 85% of the students used the virtual classroom. However, analysis of the usage patterns of the virtual classroom showed that only one third of the students used it frequently, that is, at least twice a day. The other two thirds of the students used the virtual classroom approximately once every two days. This appeared to be sufficient for the students in this latter group to pass the final examination; however, they did not pass with high marks. In fact, in a survey conducted at the end of the experiment, the students in this group said that they only used the virtual classroom because they did not want to forfeit the 10% assessment mark.

Given the positive results obtained by the increased number of students who passed in the first experiment and the fact that the students' usage was motivated primarily to get the marks, a second experiment was conceptualized with the goal of further improving performance in mathematics at the first-year level. In particular, this experiment set about to determine if the virtual classroom from the first experiment could be augmented with social networking software to actively engage more students than the first experiment. This classroom is referred to as a *social virtual*

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