USING NETMEETING IN SYNCHRONOUS TEACHING AND LEARNING OF MATHEMATICS FOR UITMS STUDENTS

RESEARCH MANAGEMENT INSTITUTE
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM
SELANGOR
MALAYSIA

BY :

LING SIEW ENG
RASIDAH MAHDI
CHEN CHEE KHIUM

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Prof. Dr. Abu Bakar bin Abdul Majeed
Assistance Vice Chancellor (Research)
Research Management Institute (RMI)
Universiti Teknologi MARA
40450 Shah Alam

Dear Professor,

**FINAL RESEARCH REPORT ON "USING NETMEETING IN SYNCHRONOUS
TEACHING AND LEARNING MATHEMATICS FOR UITMS STUDENTS"**

With reference to the above matter, I am pleased to submit six copies (2 for RMI
Shah Alam and 3 for RMU UiTM Sarawak) and a softcopy of the final research
report entitled "Using Netmeeting in Synchronous teaching and learning
mathematics for Uitms Students" by the research team from UiTM Sarawak.

Thank you.

Yours sincerely,

LING SIEW ENG

Leader
Research Project

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ABSTRACT

Over the past two decades, the advancement of technology has given different perspective to the teaching and learning approach. It has enhanced the teaching and learning by providing a flexible approach to capture the learner's attention, motivation and at the same time provide ample opportunities for independent study over a click of a mouse. Educators have no choice but to move along with these waves of change so that their teaching approaches are relevant and current. It is believe that good teaching approaches with the help of appropriate tools can improve better understanding in the teaching and learning process. Hence, incorporating technology in the teaching and learning is a must. However, to come up with an appropriate tool is not that simple. There are many technology tools being developed and the fact that certain technology tool is developed for a specific purpose makes the choice more difficult. Therefore, when a certain technology tool is chosen to enhance the teaching and learning approach, a proper study needs to be conducted to assess its effectiveness and challenges prior to its implementation.

This study incorporated NetMeeting as a tool in the teaching and learning of Mathematics. NetMeeting is a window real-time collaboration and conferencing groupware developed by Microsoft. It is included in Windows 95 to Windows XP of Microsoft Windows. The study was to explore the possibility of teaching and learning mathematics with the aid of NetMeeting to the students of UiTM. It was done in two phases and involving 86 respondents who were registered for Pre Calculus and Introduction to Probability courses at University technology MARA Sarawak. Quantitative and qualitative data were collected to assess the students' perception on using NetMeeting as a tool in the teaching and learning of Mathematics. The students experienced the teaching and learning with the aid of NetMeeting prior to the data collection.

The study findings are in support of using NetMeeting as a tool in the teaching and learning on Mathematics in UiTM Sarawak. Five of the highest listed advantages of using NetMeeting identified in the study were enhancing the understanding of the subject matter, making   learning more interesting, saving time, attracting learner's attention, improving the visual quality of the lessons and increasing learner's motivation. However, they expressed concern on the technical aspects in the application of NetMeeting. The issue of technical support is a very important factor to address, otherwise all the advantages that goes along with the implementation of the NetMeeting will be overshadowed by the technical problems faced.

CHAPTER 1

INTRODUCTION

1.1   Introduction

In this 21st century, technology is becoming an important aspect of innovative teaching and learning. Incorporating technology in teaching and learning has also being initiated at the same time when there was innovation in technology (Bersin, 2004). Over the past two decades, the advancement of technology has given different perspective to the teaching and learning approaches. Teaching and learning approach has been enhanced through a flexible means that can accommodate the learner's capability, their time independency and has provided ample opportunities that were hindered by distance before. In addition, it is able to provide independent learning approach that is interactive, interesting and able to accommodate the new generation of learners that are computer savvy. Since the innovation in technology thousands of new educational software were released and many are now widely used (McCabe, 2010).

Among the different ranges of technologies available for classrooms learning includes simple tool-based learning, handheld computers and personal digital assistant (PDA) (Prensky, 2001). Different technologies are created for different purposes and to successfully use the technologies to enhance teaching and learning process, the educators select them appropriately. It is very important to understand what the technologies were created before one considers to use them. For examples, simple's tool-based application such as e-mail and word processors serve as a platform for communication skills, spreadsheet programs and databases enhance organizational skill while modeling software assist in learning science and mathematical concepts (Becker, 1994). Ringstaff and Kelley (2002) and Reeves (1998) suggested two purposes of technologies used. First, it is as tutors for learning basic skills and knowledge and second it is as a tool to apply to different goals in

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