

INVESTIGATING THE USE OF THE E-MAIL IN THE TEACHING
AND LEARNING OF A TECHNICAL SUBJECT AMONG
POLYTECHNIC UNGKU OMAR STUDENTS

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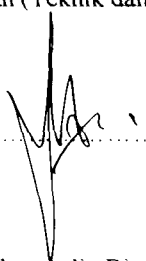

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
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ABSTRACT

Through the use of technology in education, effectiveness in the teaching and learning process can be achieved. In this project, the researcher wants to identify whether the usage of the electronic mail in the teaching and learning of a technical subject will benefit the teaching and learning process or not. Other than that, researcher wants to identify problems faced in applying the electronic mail in the teaching and learning of a technical subject among Polytechnic Ungku Omar students. Respondents of the project were one class of Polytechnic Ungku Omar students who were taking Data Communication subject. There were two research approaches used in getting the data which are qualitative approaches and quantitative approach. Qualitative data includes data collected through observations, interview and content analysis. Quantitative data includes data collected through questionnaires. Data collected reveals that participants used the e-mail in different ways which brought them various benefits. E-mail was used as a pedagogy of teaching and learning, medium of communication and tool for different purposes like academic purposes, general query and query for personal development, socializing, complaining and suggesting ideas. The use of e-mail was influenced by factors like gender, personality, experience in using e-mail and the features of the e-mail itself. However, the problem faced by the students such as slow downloading or server problems, limited number of computers for use, limited number of computer labs, many of the computers in the polytechnic were not working properly, crowded computer lab, compact personal time table, lecturer to students ratio was too high, difficult to understand the description, do not have enough money to surf at Cyber Café and no free or confirmed access to Internet in Polytechnic have influenced the use of the electronic mail in the teaching and learning of a technical subject among Polytechnic Ungku Omar students

ABSTRAK

Melalui penggunaan teknologi dalam pendidikan, proses pengajaran dan pembelajaran yang efektif akan dapat dicapai. Dalam projek ini, penyelidik ingin mengenalpasti sama ada penggunaan mel elektronik dalam pengajaran dan pembelajaran subjek teknikal akan membawa faedah ataupun tidak. Di samping itu, penyelidik juga ingin mengenalpasti masalah yang dihadapi dalam mengaplikasikan penggunaan mel elektronik dalam pengajaran dan pembelajaran subjek teknikal di kalangan pelajar Politeknik Ungku Omar. Responden kajian ini merupakan salah sebuah kelas di Politeknik Ungku Omar yang mengambil subjek Komunikasi Data. Terdapat dua jenis pendekatan kajian yang digunakan dalam proses mendapatkan data iaitu pendekatan kualitatif dan pendekatan kuantitatif. Data kualitatif termasuklah data yang dikumpulkan melalui pemerhatian, temu bual dan analisis kandungan. Data kuantitatif pula termasuklah data yang dikumpulkan melalui soal selidik. Data yang dikumpulkan menunjukkan peserta-peserta menggunakan mel elektronik dalam pelbagai cara yang akhirnya mendatangkan pelbagai faedah. Mel elektronik digunakan sebagai pedagogi pengajaran dan pembelajaran, medium komunikasi dan peralatan untuk pelbagai tujuan seperti akademik, pertanyaan, bersosial, mengadu dan memberikan idea. Penggunaan mel elektronik dipengaruhi oleh faktor seperti jantina, personaliti, pengalaman dalam menggunakan mel elektronik dan ciri-ciri mel elektronik. Walau bagaimanapun, masalah yang dihadapi seperti masalah server, kekurangan makmal komputer dan komputer, komputer tidak berfungsi dengan baik, makmal komputer yang sesak, jadual peribadi yang padat, nisbah pensyarah terhadap pelajar terlalu tinggi, susah untuk memahami penerangan, masalah kewangan dan tidak ada akses yang percuma di Politeknik telah mempengaruhi penggunaan mel elektronik dalam pengajaran dan pembelajaran subjek teknikal di Politeknik Ungku Omar.

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LIST OF ACRONYMS

CMC	-	Computer-Mediated Communication
E-mail	-	Electronic Mail

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CHAPTER I

INTRODUCTION

1.1 Introduction

Through the use of technology in education, effectiveness in the teaching and learning process can be achieved. According to the US Department of Education 1995 forum, many advantages can be achieved through the use of technology in the teaching and learning process as in the following statement:

“Technology can enhance the achievement of all students, increase families’ involvement in their children’s schooling, improve teachers’ skills and knowledge and improve school administration and management.”

It is because through the use of technology, teacher can learn how to develop teaching material by using web and other interesting teaching material and students will be more motivated with the use of the new teaching material. Through the use of facilities available in Internet such as e-mail, school administrations can communicate with each other easily and this facilitates the management of the

school. With the use of technology, parent can monitor their children's schooling easily.

How technology can enhance student's achievement can be seen in four aspects. The aspects are basic skills instruction, advanced skills instruction, assessment of student progress and student motivation (US Department of Education forum, 1995). Basic skills instructions include teaching multi-media software to the students and distance learning. Advanced Skills instruction includes students learning about interactive technologies like the Internet and problem solving skills. Assessment of student progress is done with active participation from the student. Student's motivation includes the involvement of family members and the student will like it better.

Electronic mail is one of the Information and Communication Technology (ICT) that can be used in the teaching and learning process (Vilmi, 1995; Baharuddin Aris, *et al.*, 2000; Graham and Scarborough, 1999). The computer is the main medium in applying the electronic mail in the teaching and learning process. The importance of computer can be seen through EPF scheme which enable EPF saver to use a certain amount of the money in buying a computer. According to Datuk Chan Kong Choy, deputy of finance minister, government effort in carrying out the campaign 'one house, one computer' is a good effort in developing more computer literate citizens. (Utusan Melayu, 2001)

According to Carmen de Pablos Heredero, *et al.* (2002), uses of electronic mail eliminate the identity barriers in relationship with time and space. This means that our behavior and thought are affected by the way in which people use the technology. According to Carmen de Pablos Heredero, *et al.* (2002) also, electronic mail is defined as a way to exchange information where messages can be sent from a personal computer or terminal to another via modem and telecommunication systems. The use of electronic mail as a communication tool for academic and personnel relationship started since 1970. It was seven years after the use of

electronic mail started with ARPANET (as an Internet precursor) in 1963. Electronic mail is an electronic means which enables a fast communication between sender and receiver. Some of advantages identified by Carmen de Pablos Heredero, *et al.* (2002) were stated below:

- a) receiving and sending messages are very fast
- b) reliability in the reception and sending of messages
- c) sender and receiver does not need to be at a specified place
- d) messages is easy to store, resend and integrate
- e) low cost

Electronic mail is one type of Computer Mediated Communication (CMC). Communication with electronic mail is asynchronous with communication being over an extended period of time. According to Cullimore (1999), the theoretical advantage of CMC tools for teaching is that they widen the community of learners. This means that it can connect many learners in the teaching and learning process. Learners can send and receive messages at their convenience.

Research done by Belisle (2002) showed that by using computers, students can become better problem solvers and better communicators. It is because learners can create, analyze and produce information and ideas more easily and efficiently. This advantage will help the students to handle problem faced in their daily life.

However, the use of electronic mail also has some disadvantages. According to Kenji Kitao and S.Kathleen Kitao (2001), one of the disadvantages of e-mail is that the receiver of the message sent cannot see the sender of the messages and this makes it difficult for the receiver to understand the sender emotions such as anger, sadness and happiness. Thus, it may be difficult to understand what the writer or the sender of the message means.