Use of electronic mail (e-mail) as a resource in a Universiti Kebangsaen Malaysia (UKM) English-as-a-Second-Language (ESL) teacher education course in 1997-98 is described. The second-year undergraduate course, "The Teaching of Reading Skills in an ESL Context," enrolled 115 students with a range of experience with computers. One course project was a 7-to-10 page research paper in which students must use information from an electronic bulletin board in ESL reading and further expand the topic using library materials. Students were required to include a minimum of two references from the e-mail resource, and worked in groups of 3-4 students. They were instructed to pose a question or message to the list and engage in a discussion, and submit a print-out as part of the paper. Initially, students were placed into tutorial groups to provide practice with e-mail, gain support during the course of the project, and present their papers before submitting them to the instructor. Participants were surveyed after the project concerning their perceptions of it, difficulties encountered, preferred aspects of using e-mail, experimentation with other lists and Web sites, and perceptions of the small-group project experience. Student comments are included. Contains 9 references. (MSE)
E-Mail as a Resource in Teacher Education

Introduction

In the past decade, we have witnessed rapid development in information technology due to advancements in computer technology. Educators are aware of the impact of these developments on education, and have been quick to respond to the changes brought about by these emerging technology on instruction. For instance, computer technology in the form of on-line communication has been used by many teachers around the world and has been found to be a success with both teachers and students (Warschauer & Whittaker, 1997; Shelley, 1997). Thornburg (cited in Shelley, 1997) describes this era as the Communication Age, that is, a time whereby an extensive change will occur in education as a result of computer-based technology. These new technologies provide various possibilities for instruction within the classroom. These changes have forced educators to review and redirect their perspectives on learning and teaching; and consequently, on the use of technology in the classroom (Shelley, 1997).

As early as the 1980’s, computer-based technology in education is realized as very significant in Malaysian schools. Computers in Education (CIE) projects conducted by the Ministry of Education were conducted as an attempt to introduce computer literacy among students in both rural and urban schools (Abas, 1995). The Ministry has been conducting various projects, since then, in the effort to educate both teachers and students on the use of computers in education. Teacher training programs in colleges and universities emphasize the need for these future educators to become computer-literate, and to be able to add to their pedagogical repertoire various computer-based applications in education.

At Universiti Kebangsaan Malaysia, in the Bachelor of Education in the Teaching of English as a Second Language (B.Ed. TESL) program, students are exposed to various types of applications of computer-based technology. Although there are specific courses offered to these students that teach them about computer-based instruction, other content courses such as the Teaching of Reading and Writing in an ESL/EFL Context expose these students to the use of computers in enhancing their own learning.
This paper describes the use of computer-based technology, specifically electronic mail or e-mail, as a resource in a teacher education program at the university. First, a brief definition of e-mail and its benefits are presented. Next, an explication of how e-mail was integrated into the course which was coordinated by this instructor, followed by a brief discussion of the overall student performance on the paper project, and finally, an overview of the results of the survey conducted on students' perceptions of the e-mail project in general, and of the e-mail task, in particular.

E-Mail and Its Benefits

Electronic mail or e-mail is a powerful tool that provides numerous possibilities in education. E-mail began as a military communication tool in the US (Warschauer, 1995) in the early 1960s, however, later its use was extended to various academic institutions. Today, it is used by professional and business organizations and even by many individuals for personal communication. In education, e-mail has been found to be supportive of language acquisition (Kern, 1996). Some of the advantages of using e-mail as a language learning/teaching tool as outlined by Warschauer (1995, pp. 2-3) are: (a) It gives students the opportunity for real, natural communication, (b) It provides authentic situations and motivation, (c) it empowers students to learn independently, (d) It enriches the experiences of both students and teachers, and (d) It provides teachers with the information, contacts, and stimulation that make teaching effective and enjoyable.

Teachers and educators in developed countries have long explored the various potentialities of e-mail in the classroom. They conduct classes across schools and across the globe, making intercultural communication and connections through sophisticated use of e-mail (Shelley, 1997; Warschauer, 1995; among others). This is possible because the necessary infrastructure and support needed for such projects as availability of computers, Internet accessibility, easy scheduling of courses, access to an efficient e-mail system, and teacher acceptability and literacy of computer-based teaching are available. Assuming all these rudimentary requirements are met, e-mail can then play an enabling role in education.

In the light of the availability of basic equipment and support at the university, e-mail is introduced within the B. Ed TESL program such that it fulfills a pragmatic purpose. Therefore, this instructor incorporated e-mail in the course to encourage students to use the available computer-based technology to enhance their learning. The e-mail project was thus conducted within the constraints mentioned above.

Background

Computer-based technology at University Kebangsaan Malaysia (UKM), specifically at the Faculty of Education and the Faculty of Language Studies, is regularly being used in the teaching and learning of various courses. Students use of computers range from basic word-processing to the creation of useable courseware for specific audiences. For instance, in a Computer Assisted Language Learning (CALL) course in a B. Ed TESL
program, students are given the opportunity to create educational software for a specific audience (Buku Panduan Faculty Pengajian Bahasa, 1997/98). In addition to these specific computer-based courses, other content courses within the B. Ed. TESL program integrate the use of computers in students' assignments and projects. One such course is the methods course entitled The Teaching of Reading Skills in an ESL Context.

The Students

The 115 students who enrolled for the course were in the second year (Semester I 97/98) of the B.Ed TESL program. The program is a joint 3-year program between the Preparatory College (PPP-ITM) of the Mara Institute of Technology, Shah Alam and Universiti Kebangsaan Malaysia (Faculty of Education/Faculty of Language Studies). Students spend a year of matriculation at PPP-ITM and complete the remaining two years at UKM. The students' exposure to computers have been mainly with word-processing. However, there are a few students who regularly use the Internet in pen-pal communication.

Integrating E-mail

The Teaching of Reading Skills in an ESL Context is a content course that introduces students to the major aspects of reading theory, research, and instructional approaches and techniques pertinent to the ESL teaching and learning situation (Buku Panduan Fakulti Pengajian Bahasa, 1997/98, p. 146). A part of the evaluation of the course includes a 7 to 10-page research paper in which students are required to use information gained from an electronic bulletin board (Tesl-L) in the area of reading in ESL/EFL and to further expand on the topic through a related literature review using materials from journals and books in the university library. The main purpose of the project is to encourage students to use the Internet as an information resource. Another goal is to expose students to “authentic” communication with other educators in the area of TESL/TEFL via e-mail. A third goal is to motivate students to use computer technology in their academic work through a structured task. Previous research support the use of structured “product-based” activities as incentive for the use of computer-based technology such as e-mail (Collis, 1993; Goodwin, Hamrick, & Stewart, 1993).

The research paper/e-mail project constitutes twenty per cent of the course evaluation. The students are required to include a minimum of two references from the e-mail resource. The students had to work in a group of between 3 to 4 students. Because a majority of the students have never used e-mail, collaborative work would give students more confidence with the task (Warschauer & Whittaker, 1997). The students were given instructions on how to approach the task. They were told to access the electronic bulletin board, “TESL-L”, on the computer at the computer laboratory. TESL-L is a special discussion list for teachers in the area of teaching English as a second language (Warschauer, 1995). Students were instructed to pose a question or message to the list and to engage in a discussion on a particular topic of interest. They are also required to keep a “print-out” of the message or discussion and submit it as part of their paper.
Students work collaboratively at the computer terminal, that is, they take turns to interact on the TESL-L list, and contribute towards writing-up the actual paper to be submitted.

Preparation for the E-mail Project

For the course, students were put into four tutorial groups, with an instructor per group. Each group had between twenty-two to twenty-five students. A qualified instructor in the area of CALL was invited to provide an hour of hands-on practice to the students on how to use e-mail for the project. Students were first given copies of information relevant to the project: accessing free e-mail accounts on the Internet, how to register on the TESL-L list, how to post messages to the discussion forum, and how to write citations of e-mail materials for their paper. After some practice and discussions, students were ready to begin work.

The students were encouraged to meet with their instructors during the course of working on the e-mail project. Regular conferences were held to consult with instructors as to the topics chosen and in dealing with any project-related problems. The students were given approximately 6 weeks to work on the project before submitting their group paper.

Results of the Project

The Paper

Prior to submitting their papers, the students had to briefly present their papers to their respective tutorial groups. In their presentation, each group member discusses content and any problems they faced while working on the paper, and in particular, on any problems they had with the e-mail task. In general, the instructors found the papers to be informative. There were the usual stylistic and grammatical problems, but these were minor problems which did not affect the overall quality of the paper. A majority of the groups had a “B” average in terms of content for the paper. Discussions of a particular topic revolved around an issue that was discussed in the “dialog” on the TESL-L list and were well supported with information from articles from journals and books students accessed from the library.

The Survey Questionnaire

At the end of the paper project, students were asked to respond to a brief survey questionnaire on the paper project. Only 90 students out of the 115 responded to the questionnaire. The focus of the questions are on: (a) the project as a whole, and (b) the e-mail task in particular. The following are sample responses for each of the questions on the questionnaire:
Students’ Perceptions of the E-mail Project

1. (a) Did you like doing the e-mail project? (b) Why?
A majority of the students (72.2%) said “Yes”.
Some of the students’ reasons include “interesting”, “something different from traditional assignments”, “a chance to explore other websites”, “can get free email”, “motivating to use computers”, “can interact with other people around the world”, “helps me develop my computer skills”, “fun”, “get the chance to communicate with people around the world”, “something new”, “get the chance to use Internet and e-mail”, “able to get information from people expert in reading”, “enjoyable”, “new experience”, “more academic use of e-mail instead of just to chit-chat with friends” and “get contact with other experienced teachers”.

Some of the negative responses include such statements as “time consuming”, “frustrating to wait for replies”, “expensive—difficult to get feedback”, “computers over crowded”, “slow computers”, “not enough computers”, some group members not cooperative”, most questions not directly replied to”, “not interested in e-mailing for project, only to contact friends or lecturers”, “need more information about the net”.

2. (a) Did you find anything difficult about the project? What were some of the problems?
A majority of the students point to the following factors as problematic:
1. Limited access to computers with Internet.
2. Difficulty in getting replies
3. Time constraints—need to book the computer at the lab.
4. Some replies are not relevant to topic chosen.
5. Computers too slow and frequent technical problems
6. Group work is difficult because members scattered all over campus.

3. What did you like most about using the e-mail?
Many of the students liked the following factors:
1. Getting quick feedback/information from experts all over the world.
2. Communicating with others in the field.
3. Getting various ideas and opinions on a single topic.
4. Reading the different responses from all over the world.
5. Being exposed to Internet.
6. Seeing your message on the list.
7. Opportunity to use the computer.
8. Getting to know people and getting great replies.
9. Quick way to get information.
10. Sending and getting replies.
4. Did you face any problems using the e-mail?

Most of the students mentioned the problem of availability of computers. Students had to book a computer at the computer laboratory early. Another problem is accessibility. Because students do not have a university e-mail account, they had to rely on the free “HotMail” on the Internet. Computers in the laboratory are slow because of the large number of people accessing the computers at one particular time. Lines become congested and students had to sometimes use the “Cybercafe” computers (commercial cafes with Internet facilities where students have to pay for Internet services).

5. Did you learn anything new while using the e-mail?

Some of the students’ more common answers include the following:
1. Able to browse other websites.
2. Learning how to send messages.
3. Able to use the e-mail.
4. Learnt how to visit the other sites.
5. To interact with other people from other addresses.
6. How to get quick and useful information.
7. Able to get a rich source of information from e-mail and Internet.
8. Replies sent in are really useful and beneficial.
9. Learnt that there is a site such as TESL-L for teachers of English.
10. Learnt how to subscribe to a number of important and relevant sites.
11. Learnt how to handle a computer.
12. Able to share ideas with other people around the world on a computer.

6. Did you visit other “sites” while using the Internet?

Most of the students said they tried other lists and websites. They experimented with search engines such as “Yahoo” and “Infoseek”. They accessed local newspaper and some foreign homepages. Some even managed to read the online TESOL Journal and other teacher lists on TESL-L branches such as TESP-L and TESLC-L and TESLK-L. Other students said they were not very familiar as yet with other sites and so did not venture into new grounds.

7. Do you think the e-mail project is useful?

All the students found the project useful, even those who had earlier said they did not like the e-mail project (Question #1).
8. Would you recommend the use of e-mail or Internet for other courses?

Most of the students stated that they would recommend e-mail/Internet for other courses. Some suggested that assignments should be submitted via e-mail and that the computers should be upgraded so that they could access the Internet more efficiently. Students also requested for more time to do the project. A majority requested for more computers to be placed in the computer laboratory. Student thought that individual e-mail accounts should be provided by the university, or at least or a particular course that requires the use of the Internet.

9. What is the most interesting part of your experience using e-mail for the course project?

A variety of answers were given, some of which are the following:

a) When I get the relevant responses from people in education.
b) The opportunity to use e-mail.
c) Becoming familiar with the Internet/e-mail.
d) To know that there are people to talk to with the same interest and topic of concern.
e) Chance to explore other websites.
f) Sending and receiving e-mail.
g) Learning to use the computer for a specific purpose.
h) Ability to interact with “real” people all over the world.
i) Seeing your message on screen and getting the responses to the questions.
j) Realize that I can use the Internet and it can help me as a teacher.
k) Getting replies from experienced people from all over the world.
l) Getting replies from well-known researchers.
m) Getting different opinions on a problem posed.
n) Getting a free mail account.
o) Global connection.
p) Logging-in as an e-mail user.
q) Able to get information on postgraduate programs and making acquaintances with TESL-L subscribers.

10. Did the e-mail help you in writing your course paper?

The majority of the students found e-mail helpful in that it gave them the required information and ideas to trigger further research on their topic for the paper. Some thought that the responses are often too limited and sometimes irrelevant. many of the students were glad that the e-mail served as impetus for them to explore other sites for more information on the topic of their paper.

11. Did the e-mail help you and your group members to work together for the project? In what way(s)?
Students’ common responses include the following:

- It was fun working on something new together.
- Team work caused little miscommunication.
- The workload could be shared.
- We worked together in sorting out relevant information.
- We “surfed” the net together, and that was fun.
- We shared the “cost” too at the Cybercafe.
- We could check the mail everyday because there were four of us.
- We could share information and build our confidence together.
- The group members who know how to run the e-mail could teach those new to the technology.
- We could brainstorm and refine the ideas that go into our paper.
- Group work helped us complete the paper.
- We shared not only the interesting parts of the project, but also shared problems related to the project.

Discussion

The main purpose of the e-mail project was to introduce e-mail as a resource for students in writing their course paper. An additional goal was to encourage students to use computer-based technology in their academic work. Based on the outcome of the project and the responses on the survey questionnaire, it can be said that e-mail has benefitted the students in enhancing their learning process. In general, the students found its use helpful, interesting, and challenging. The major problems are those related to technical matters and logistics. For instance, students had to share computer-time with other students from various other courses. Another common problem was the time-lapse between sending a message and receiving a response, which had sometimes taken several days. These problems parallel some of those faced by other instructors/educators who had adopted e-mail into their courses (Goodwin, et. al, 1993; Shelley, 1997; Warschauer, 1995, among others).

Warschauer (1997, pp. 27-33) suggest a number of steps that need to be considered for successful planning and implementation of computer-based learning projects. The guidelines he proposed are not specific for a particular technological tool. Therefore, they can be applied to the use of e-mail. The five steps he outlined are: (1) Careful consideration of our goals for using e-mail. Because there are various ways of integrating e-mail into a course, it is important that instructors make clear his or her goals. Computer activities can be structured according to the purposes of using the e-mail. (2) Think of integration. Activities should be integrated into the course. E-mail should not just be an “add-on” activity. There has to be an incentive for the students to use e-mail. (3) The complexity of the task should not be underestimated. Some students may not be familiar at all with computers. Students need to be prepared before they attempt to use e-mail. Hand-outs on basic information on how to use the computer and e-mail, and hands-on experience sessions should be made available to students. (4) Instructors should provide the necessary support for students.
Assistance such as providing information sheets, instructor-student conferencing times and group-work can help prevent students from being overwhelmed by the e-mail task. (5) Decision-making should involve students. Students’ opinions and ideas about e-mail should be considered by instructors. Students can be involved in deciding the direction of the class -- can they decide on topics to research on and so forth.

Acceptance of computer-based instruction by teachers is dependent upon the teachers’ perceptions and attitudes. Asking teachers to accept new technology is actually requiring them to change their behaviors (Shelley, 1997). However, in a world that is rapidly drawn into the vast “information super-highway”, teachers need to be prepared to become computer-literate in order to assist students in their learning process. Therefore, attempts at integrating computer-based technology such as the e-mail need to be encouraged among teachers and educators.

*Buku Panduan Fakulti Pengajian Bahasa, 1997/98*. Bangi, UKM: PTP.


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