



# E-Learning: Current Trends, Practices and Issues for Future Consideration

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## ABSTRACT

As public interest in the Internet continues to grow, there is an increasing pressure on educators to incorporate Internet resources into traditional classroom programs in new and creative ways. Some institutions have introduced Web-assisted options as a supplement to face-to-face communication between students and educators/trainers, whilst others offer Web-based learning with the Internet as the sole medium for delivery. To date, there has been some debate with regards to the perceived effectiveness of these Web-assisted options (from the point of view of both teaching staff and students). This paper presents the results of a preliminary study of the students' attitudes towards web-assisted learning (within the Christchurch Polytechnic Institute of Technology - CPIT).

## 1. INTRODUCTION

The Internet has not only had a profound effect on almost all businesses but also on educational/training sectors. The Web has altered the nature of information and the way in which people now communicate, resulting in an accelerated growth in the numbers and modes of learning options that are currently available.

Many innovative educators/trainers are having to constantly create new and exciting ways in which to use the Internet in order to provide Web-based education and training opportunities. Over the past few years we have witnessed an increasing number of tertiary educational institutions attempting to offer a wide variety of Web-based (online) courses, qualifications, as well as degree programs.

Today, various institutions are using a wide range of options where Internet-based or Web-based learning is concerned. Some consider Web-assisted options as a supplement to face-to-face communication between students and educators/trainers, whilst others offer Web-based learning with the Internet as the sole medium for delivery.

In early 2001, Christchurch Polytechnic Institute of Technology established an E-Learning Support Unit and introduced a new course management tool (Blackboard) for online delivery of courses/papers. Throughout 2001 and 2002, some teaching staff introduced Blackboard as a supplement to face-to-face classroom teaching, whilst others used Blackboard to develop courses (on a trial basis) to be delivered electronically.

In this paper, I discuss a first impression (review) of the trends and practices with regards to e-learning within the institution. This is the result of a preliminary study of the way in which students view e-learning.



## 2. E-LEARNING: THE CURRENT STATE-OF-THE-INDUSTRY

Today, e-learning appears to be taking root in organisations of all sizes - even though there are often different views concerning the ways in which e-learning can benefit individuals or organisations.

A research by the International Data Corporation (IDC) and Online Learning Magazine (OLM) demonstrates the general attitudes towards e-learning - as expressed by a group of OLM readers about training within organisations (Kiser 2001). According to this research, to date, the people who have been responsible for the implementation of e-learning solutions seem to be pleased with the results.

It appears that, 80% of the respondents claimed that they use some form of e-learning, most often online courses. There are indications that this percentage will grow higher - as more than 40 percent of the respondents whose employers haven't adopted e-learning are apparently planning to do so within the next two years. Furthermore, 82 percent of respondents (who used e-learning) were satisfied with their companies' initiatives to introduce online learning solutions. Most of the respondents particularly liked the versatility of e-learning - such as training employees, customers and suppliers. However, it is important to note that according to respondents, the majority of their organisations' training still happens in the classroom.

From this research, one of the most important reasons for using e-learning was its convenience for employees - even though results indicated that the vast majority of learners do their e-learning at work (just as if they were attending a traditional class).

Most organisations seem to have undertaken unstructured ad-hoc approaches for managing e-learning. More specifically, less than half of the respondents indicated that their organisations have a formal learning management system (LMS) in place.

Overall, it appears that there is an increasing interest in the application of e-learning within organisations - even though most of their training still happens in the classroom. However, adopting the new e-learning technologies seem to be slow - as it is evident from the ways in which learning is managed within organisations.

## 3. METHODOLOGY

A student survey was conducted in order to establish an understanding of students' attitudes towards web-assisted learning using Blackboard. The questionnaire that was designed for this pilot study contained 17 questions. A small focus group of year-3 Bachelor of Information and Communication Technology (BICT) students was formed in order to trial and fine-tune the questionnaire prior to conducting the survey.

The sample for this pilot study included year-3 BICT and a number of Graduate Diploma in E-Commerce students - who had been introduced to Blackboard since the 2nd semester of 2001. Most of these students used Blackboard as a supplement to face-to-face classroom teaching.

Questions 12-17 were designed to be evaluated using Likert Scaling as an unidimensional scaling method (Trochim 1999). The set of scale items and the associated ratings are as follows:

- ◆ strongly agree (7)
- ◆ agree (6)
- ◆ Somewhat agree (5)
- ◆ Undecided (4)
- ◆ Somewhat disagree (3)
- ◆ Disagree (2)
- ◆ Strongly disagree (1)

## 4. SUMMARY OF STUDENT SURVEY RESULTS

This section presents a summary of the results of this pilot study:

- ◆ Overall, 86% of the respondents were full time students.
- ◆ With regards to the percentage of Blackboard-supported courses, 48% of students had half of their papers available on Blackboard. 28% of the them had 3/4 of their papers available on Blackboard. 9% of the students had all their papers supported using Blackboard and finally 14% had less than half of their papers supported on Blackboard.
- ◆ 67% of the students who participated in this survey take between 15 to 45 minutes to travel to the campus. 28.5% spend less than 15 minutes and 4.5% take between 45 to 75 minutes to travel to the campus.

- ◆ Most students access courses on Blackboard either from home/office and/or at the CPIT campus.
- ◆ Most students (95.5%) had a decent remote access speed of 56kbps or above (9.5% had access to ISDN or broadband services). 4.5% did not know the speed of their connection to the Internet.
- ◆ Around 24% indicated they could manage using a computer and surfing the Internet, whilst 76% considered themselves as either “expert” or “competent”
- ◆ Learning to use Blackboard took an hour or less for almost 86% of the students (more than 74% spent only 30 minutes or less).
- ◆ Using Blackboard as a learning tool appeared to be a new experience for most of the respondents - 90.5% used Blackboard for 1 or 2 semesters only.
- ◆ The most commonly function that was utilised by students involved the viewing and downloading of course materials (90.5%). More than 70% of students in this survey utilised course information and the calendar. Assignment submission was used by 28.5% of the respondents whilst 47% used the email function. The chat function was utilised by more than 28% of the students and 14% of the respondents had experience with on-line exercise/laboratory features.
- ◆ 52% of the respondents expressed that they would prefer all their courses to be Blackboard-supported (within the next semester), whereas around 23% would prefer Blackboard to support a quarter or half of their papers. 18% seem to prefer to avoid using Blackboard altogether.
- ◆ The question on the appropriateness of remote access facility has a 5.81 (somewhat agree) score (see Likert Scaling in the Methodology Section).
- ◆ Students generally ‘agree’ (6.05) that even with course material distributed in lectures, they would still prefer to have them posted on Blackboard.
- ◆ Students were mostly neutral with a bias towards ‘somewhat agree’ (4.86) on the issue of studying courses using Blackboard on their own with minimum support. Similarly, students were neutral (4.57) when asked if using Blackboard to study would positively affect their future career.
- ◆ The respondents seemed to ‘strongly agree’ (6.67) that a good web-assisted course requires active participation from the course lecturer.

- ◆ Finally, they ‘somewhat agree’ (5.15) that the quality and usefulness of web-assisted courses vary significantly.

## 5. CONCLUSIONS

The key objectives of this pilot study were to:

- ◆ verify the key issues concerning e-learning, the current state-of-the-industry, and general perceptions/attitudes towards e-learning - that need to be considered and investigated in the future
- ◆ establish a first impression of students’ expectations and trends (with regards to e-learning).

In general, it appears that there is an increasing interest in the application of e-learning within organisations. However, most of their training still happens in the classroom. Few seem to have formalised learning management system (LMS) in place.

The key issues that were highlighted through the survey of a focus group of students are as follows:

- ◆ The students view Blackboard as a useful tool for learning. Convenience in accessing course materials is most welcomed by the students, followed by interactive learning.
- ◆ They access the course material from either the CPIT campus or from remote locations (home or office)
- ◆ All students have access to 56kbps (or higher speed) Internet access and a vast majority of them consider themselves as either ‘expert’ or ‘competent’ in surfing the Internet and using Blackboard
- ◆ They would like to see many Blackboard-supported courses - however, they value the face-to-face interaction with teaching staff and other students. For a high quality web-assisted course on Blackboard, most respondents consider ease of access and teacher participation to be of importance.

Even though these results are not to be considered final, it appears that the demand for quality, web-assisted courses with multifaceted person-to-person interaction will increase rapidly in the near future.

I hope to be able to use the outcome of this research in order to fine-tune the issues that need to be further investigated and to possibly conduct a later study using a larger sample.

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