



# Experimenting With Web-Based Course Management Applications - As A Tool For Sharing Research Information And Promoting Research

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## ABSTRACT

During the past few years, there has been a major shift in the New Zealand tertiary education marketplace - more specifically, with Polytechnics offering degree programs alongside other qualifications that they have been making readily available. It is now necessary for them to be able to demonstrate that they are capable of conducting research - more specifically, in providing support, making resources and funding available and promoting a research-orientated culture.

Polytechnics across New Zealand have applied various tools and techniques in order to promote and encourage research. This paper outlines the results of an experiment with Blackboard (a Web-based course management tool) as a tool for promoting research and scholarly activities.

## 1. INTRODUCTION

Within the past few years, polytechnics in New Zealand have acknowledged the importance of research and scholarly activities within the new environment. They have introduced strategies for encouraging and promoting research - which included

developing custom-made platforms for communicating research issues (Blackshaw *et al.*, 2001; Douglas 2000; Ferguson 2000, Mann and MacGregor 2000).

In 2001, within the Faculty of Commerce at the Christchurch Polytechnic Institute of Technology (CPIT), we initiated a pilot project in an attempt to promote a research culture and to encourage participation in research and scholarly activities. The aim of this project is to ensure that Faculty of Commerce research related information (such as interest groups, active projects, progress reports, forms, publications and so forth) can be made available online. In contrast to the development of custom designed communication systems we instead made use of the features of an existing Web-based course development and management application.

In this paper, the objectives of this pilot project; the key features of a Web-based course management application (where it concerns research); the results of what has been achieved (to date) and the benefits of our approach followed by its limitations will be discussed.



## 2. METHODOLOGY

The methodology (framework) that has been undertaken in order to develop this project is as follows:

- ◆ Assessing the requirements - in consultation with the Faculty's research committee
- ◆ Evaluating Blackboard's features - in order to determine the feasibility of using a pseudo-course structure (within a Web-assisted course management tool) as a platform for this project
- ◆ Designing the structure for developing the platform (on a trial basis)
- ◆ Building the platform (the pseudo-course)
- ◆ Uploading sample research documents into the developed pseudo-course
- ◆ Making the developed platform available to the Faculty's research committee for trial
- ◆ Making this tool available to key researchers within the Faculty for trial
- ◆ Forming a focus group in order to evaluate the outcome and plan for improvements.

The project was divided into four phases:

1. Phase 1 – Specification of the requirements and the feasibility study (as mentioned above)
2. Phase 2 – Design and development of the pseudo-course as a platform
3. Phase 3 – Development of standards and management procedures, followed by gradually uploading research related information and making the tool available to the Faculty's research committee
4. Phase 4 – Allowing access to researchers and forming a focus group for the evaluation of the achieved outcomes.

To date, the first three phases of this project have been completed. Phase 4 is scheduled for the 2nd semester of 2002.

## 3. ASSESSING THE REQUIREMENTS AND CONDUCTING A FEASIBILITY STUDY

After conducting informal conversational interviews with two researchers and two members of

the Faculty's research committee, some of the requirements were identified to be as follows:

- ◆ The speed and ease of setting up the tool
- ◆ The ability to make the information available online – both locally and from remote locations
- ◆ Ease of administration
- ◆ The ability to support online real-time communication (e.g. online meetings or discussions)
- ◆ The ability to set up and support interest groups.

An evaluation of the key features that are available through Blackboard (a Web-assisted course management tool that was acquired and implemented within the CPIT in 2001) indicated that most of the requirements that were identified earlier can be supported – through developing an online pseudo-course.

## 4. DEVELOPING THE PSEUDO-COURSE

Following the completion of the feasibility study, it was decided that an online Blackboard pseudo-course would be developed in order to achieve the objectives of this project.

The 'Course Documents' area of this online pseudo-course is used to make publications, readings, presentations and the research committee related documents available to researchers. The structure of Course Documents (as displayed in Figures 1 and 2) is as follows:

- ◆ Publications – divided into conference publications, journal publications and internal publications.
- ◆ Presentations – this includes conference presentations, internal presentations and other professional presentations
- ◆ Unpublished documents or work in progress (where applicable)
- ◆ Special interest groups' documents
- ◆ Faculty's research committee documents.

The 'Course Information' area (Figure 3) is designated to communicate information such as how to use the pseudo-course, research related events, interest groups' information, and research projects.

The 'Course Communication' area (Figure 4) can be used for electronic mail, discussion groups, virtual classroom sessions (chat) and so forth.

The 'Announcements' feature is used to communicate information such as events, changes, guides and other general information. This page is the first page that is displayed when a user logs in and activates this pseudo-course (Figure 5).

To date, a number of sample research related documents have been uploaded and made available to the members of the Faculty's research committee who are registered to trial this pseudo-course.

Next phase (Phase 4) is planned for late July (2002) it involves:

- ◆ Uploading additional research information and documents
- ◆ Registering potential research staff and making the system available for their involvement
- ◆ Evaluation of the effectiveness of this tool in late 2002.

## 5. CONCLUSIONS

Within the past few years, polytechnics in New Zealand have not only acknowledged the need for research but also introduced strategies and tools for encouraging and promoting research.

This paper discussed the possibility of using web-assisted course management tools for communicating key issues/information concerning research.

Following the development of a pseudo-course using Blackboard, we made this tool available to a focus group (some members of the Faculty of Commerce Research Committee) for trial. We are in the process of making this tool available to research staff within the faculty.

Based on what has been achieved to date, it appears that the advantages of using this approach can include:

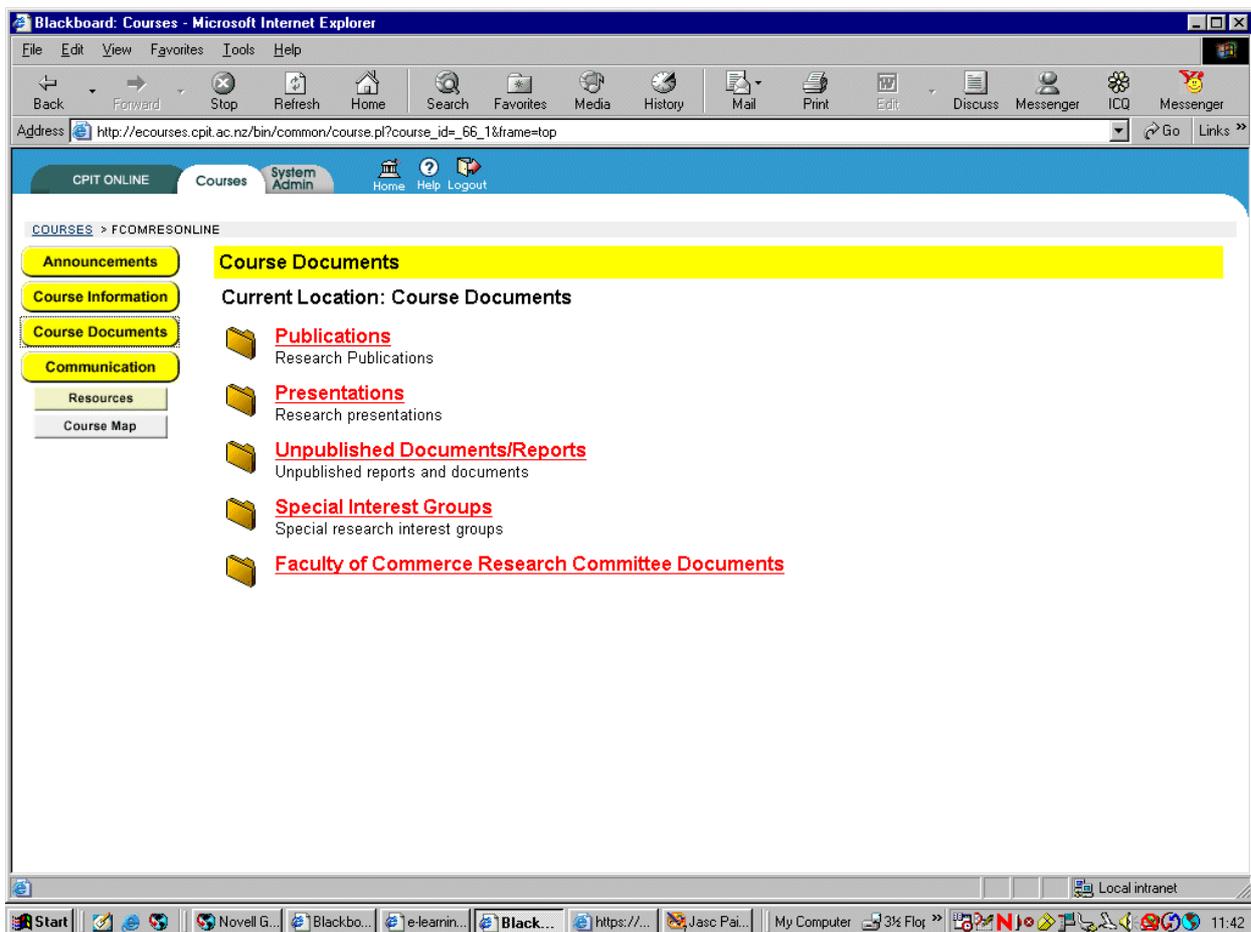


Figure 1. The application of the "Course Documents" area

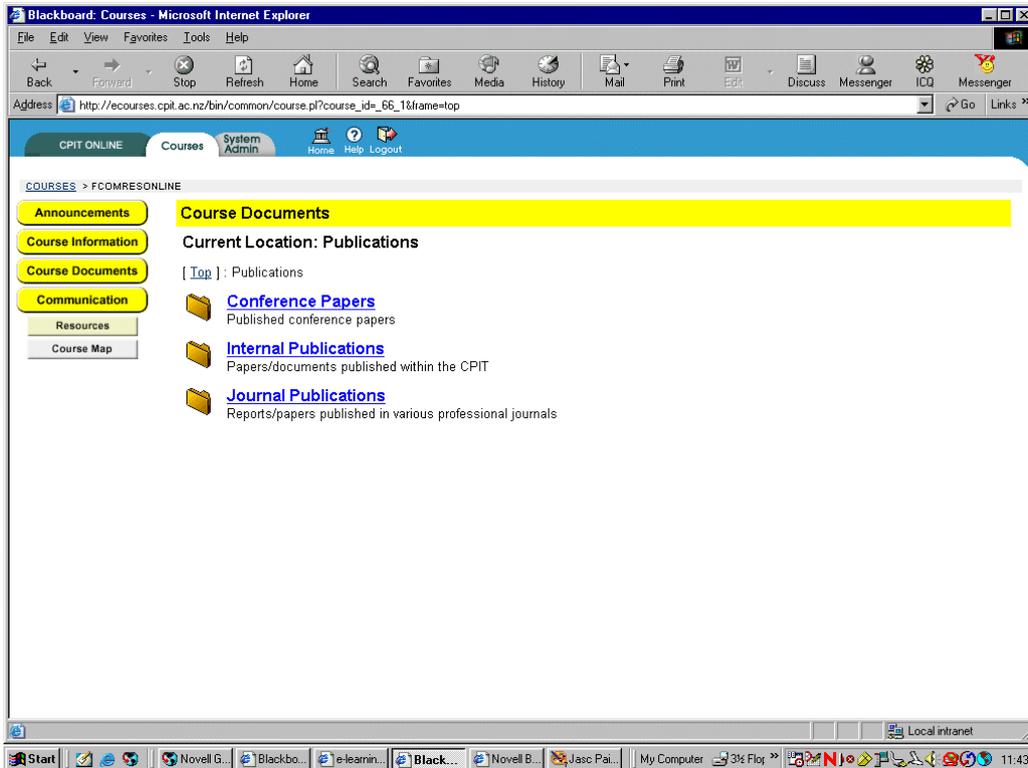


Figure 2. Publications area under the "Course Documents"

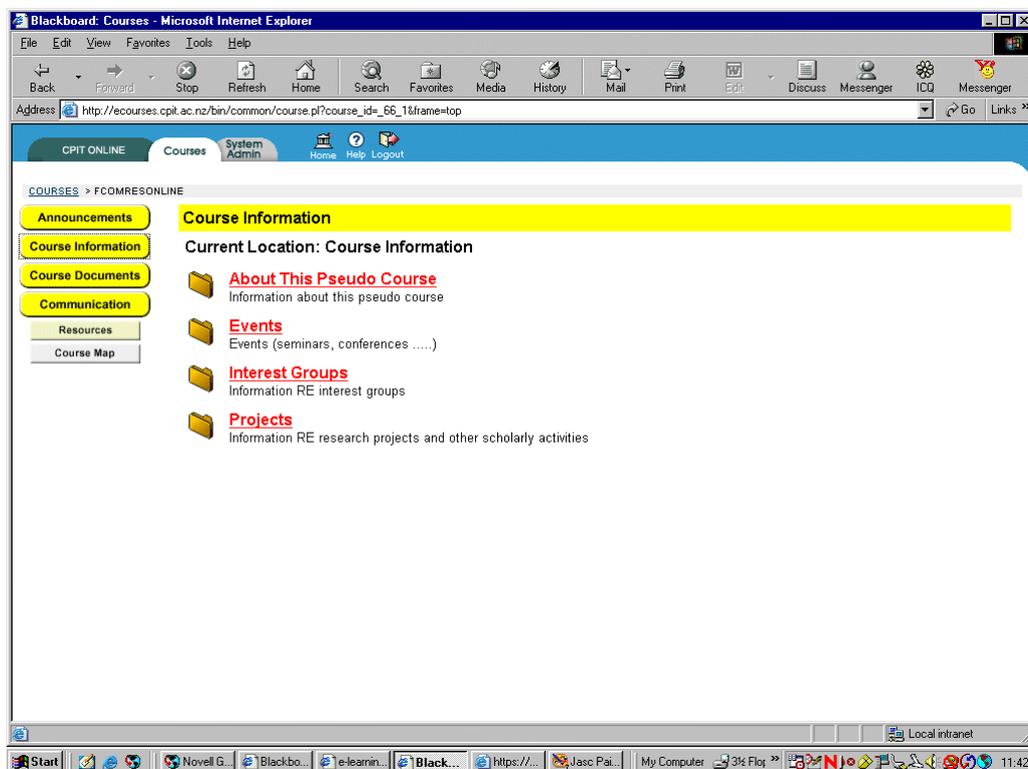


Figure 3. The application of the "Course Information" area

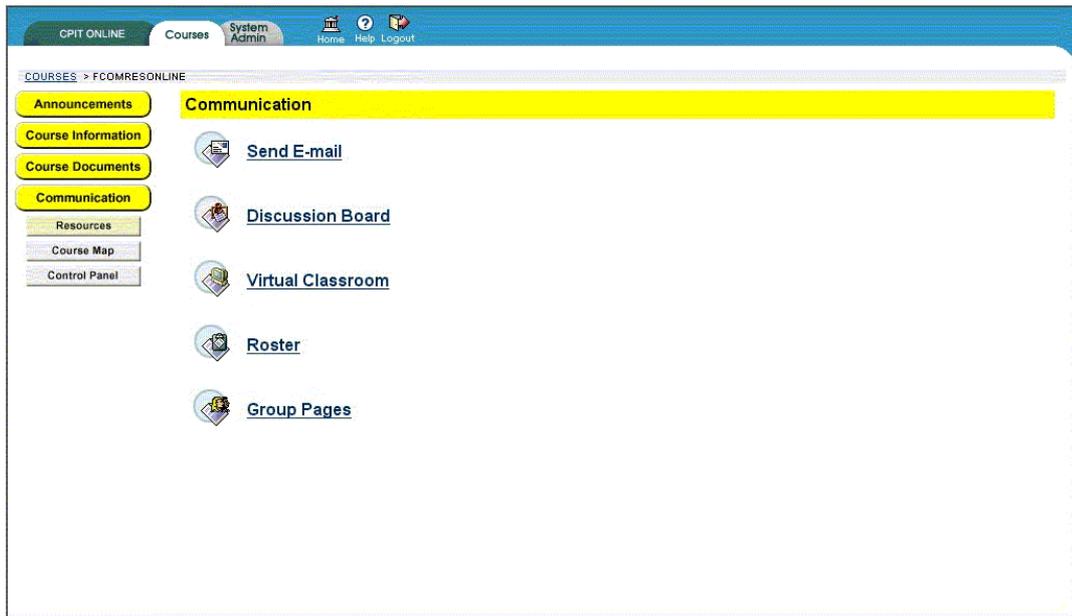


Figure 4. The features of the "Course Communication" section

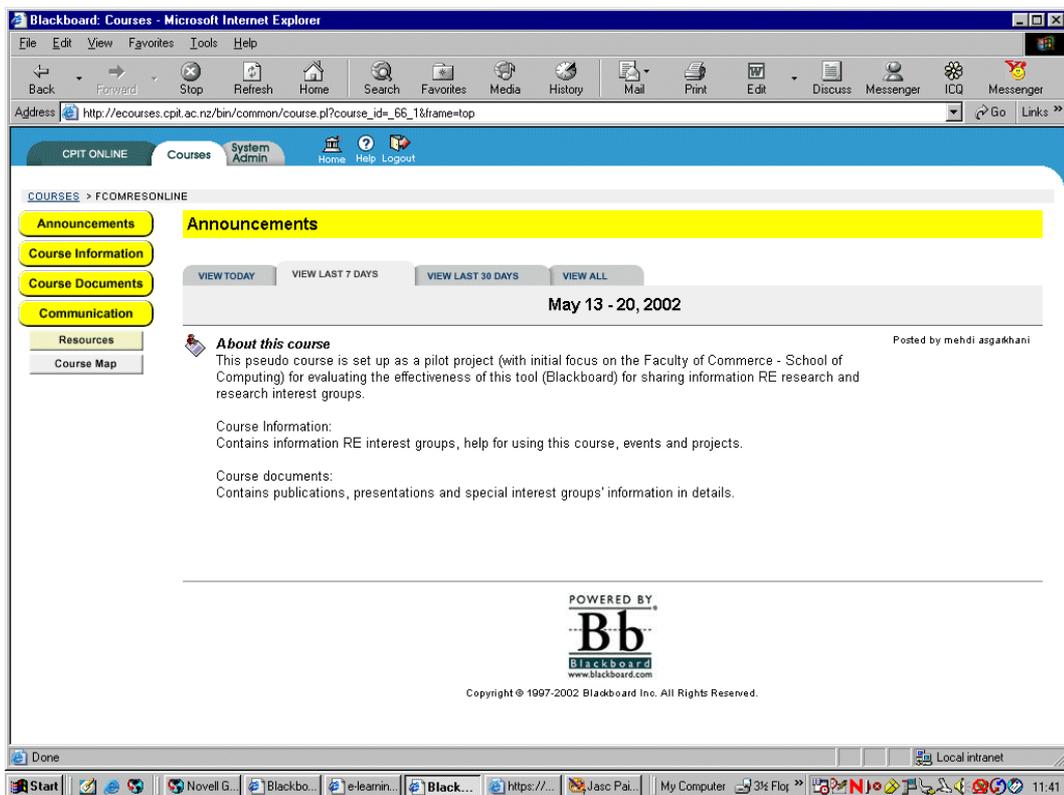


Figure 5. The "Announcements" page

- ◆ The ability to fulfill most of the requirements – in particular on a short-term basis
- ◆ The speed of setting up a structure and uploading the information
- ◆ Ease of use and administration
- ◆ Simplicity – every staff member (even those with minimum computer literacy) can learn to use the tool with minimum difficulties
- ◆ Low cost – as the application is already available
- ◆ Access to support – the support structure through the e-learning unit is already in place
- ◆ Compliance with IT application acquisition policy – no need for concern as the supporting application has already been purchased and installed.

Some of the potential issues for concern can include:

- ◆ The need for registering (enrolling) researchers before they can access the product (which may not necessarily be an issue as many research sites that have been developed require a password for access)
- ◆ Researchers cannot upload and update their own material
- ◆ The need for making sure that this approach is consistent with other solutions (if any) that are being considered across the institution.

At this point in time, this approach seems to be suitable to fulfill what is required within the Faculty of Commerce. The effectiveness of this solution will be further evaluated at the end of 2002.

## ACKNOWLEDGEMENTS

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