AARE 2001
International Education Research Conference

*Crossing Borders: New Frontiers for Educational Research*

Fremantle, Australia
2 - 6 December 2001

Title of Paper

eVenturing with Information-enabled Innovators and Entrepreneurs: Designing Customised Learning Space for the New Skill Set Requirements of eBusiness

A Working Paper for Presentation at the AARE 2001 Conference

By

**Geoffrey Chow**
Swinburne University of Technology
Lilydale, Victoria, Australia
Email: Gchow@swin.edu.au
DEDICATION

A severe illness has resulted in the inability of my initial collaborator to further contribute to the development of this paper. As a result, the progress of this paper and its full research and development were delayed. I would like to dedicate this conceptual paper to my initial collaborator and convey my best wishes for his recovery.

This paper is dedicated to:

Dr. John Brown-Parker
Senior Lecturer (former)
Centre for eBusiness and Communication
Swinburne University of Technology
Lilydale, Victoria, Australia

ABSTRACT

Existing graduate programs at the Centre for eBusiness and Communication, Swinburne University, are successfully meeting the challenge of developing information-enabled managers with the knowledge, skills and abilities to operate in complex eBusiness environments and networked global marketplaces.

Having made the transition to the virtual world of eBusiness, the next challenge was to design a flexible learning space that encouraged information-enabled learners to eVenture in cyberspace. A fresh approach was required to develop the new concepts, principles and techniques needed to help learners look beyond the horizon, identify emerging and unfamiliar indicators of change and then use sound business acumen to generate strategic opportunities and sustainable eBusiness models.

This paper describes the development of a customised learning and assessment space, built upon a tested digital delivery system, that allows learners to move comfortably through time, space and place; transcend the limitations of national boundaries and the constraints of 'bricks and mortar'; and apply the new 'virtual' skill set of entrepreneurship, innovation, change management and creativity.

Keywords:
Program design, innovation, entrepreneurship, customisation, electronic, virtual, online, flexible, learning space, graduate study, change, business.
BACKGROUND

Preamble

The initial inspiration for this paper was for developing a Masters degree subject in teaching students eBusiness entrepreneurship. The intention was to create a customised learning space for a new skill set for a virtual learning environment (VLE).

However, the author's quick review of existing literature revealed that the critical research evidence supporting the creation of such a VLE needed to be re-assessed. This conceptual paper looks at some of the existing assumptions and attempted to point to several research areas for the future.

Introduction

Changes at the Swinburne University of Technology, Lilydale campus (Swinburne Lilydale) had been taking place in respect to learning and teaching for several years. One of the most important aspects was for increased flexible and web-based learning (using online technologies).

In 1994, Swinburne Lilydale created a policy for the development and presentation of learning materials in a more flexible and multi-modal form. This policy resulted in the development of the "Learning Materials Specification" [hereby called LMS] (Paterson and Weal, 1994). The LMS was subsequently used as the basis for the development of a structured and print-based "Learning Guide". Academics and student practices were changed by the LMS at the Swinburne Lilydale campus. However, no systematic follow-up research or evaluation has been conducted to investigate the validity or efficacy of the model as a learning framework or as a subject delivery tool. The LMS framework has been the operational requirement to this day. Subjects taught at the campus produced a printed or web-based subject learning guide with its associated learning materials (see Appendix A).

OBSERVATIONS

Virtual Technologies in Teaching

Technologies that allow for the development of virtual environments or spaces within which humans may interact are quite common. It has been pointed out that many university organisations are adopting strategies for encouraging the use of virtual technologies (Peters and Roberts, 1998). Advances in telecommunications and computing technologies allow many re-definitions of instructional design. Frequently, claims are made that telecommunications and information technologies will have a revolutionary impact on higher education. These, combined with globalisation, will most likely be observed in changes to conventional instruction, course organisation and learning, content management and distribution. However, it must be noted that such changes are not always supported or seen as positive by some.

Within the context of higher education, online learning is typically directed at the content component in the form of online teaching such as eModerating and eCoaching, and other forms of tutoring. Words such as Online University, Virtual Classroom, Virtual Lecture, and eTutor now become more common place among tertiary institutions and research literature. Unfortunately, the emphasis is more often placed on the technologies at the expense of the learning or for that matter, the learner.
As mentioned previously, computing and telecommunications technologies, allow for realities that are common in our tertiary education community. These realities often are to be taken and replicated as virtual realities. While there may well be "no significant difference" on the user relative to the learning outcomes as a reality – the question one must ask "is there a difference" culturally, socially, politically, geographically, psychologically, and so on. What assumptions underline the existing practices?

**Teaching Entrepreneurship, Innovation and eBusiness**

A recent scanning search and comparison (Swinburne University of Technology Foresight and Planning Unit, 2001) of all universities in Australia indicated that a majority of universities provide courses or subjects on entrepreneurship and innovation, and to a lesser extent on eBusiness/eCommerce. Anecdotal evidence also suggests that there is a rising popularity of these courses and topics.

Swinburne University has pushed the frontier of being an "entrepreneurial university" further than any other university in Australia. It also claims to have the most comprehensive and extensive teaching of entrepreneurship, innovation and eBusiness at both the undergraduate and postgraduate levels (see Appendix B).

Existing graduate programs at the Centre for eBusiness and Communication, Swinburne Lilydale, are successfully meeting the challenge of developing information-enabled managers with the knowledge, skills and abilities to operate in complex eBusiness environments and networked global marketplaces.

**ISSUES & CHALLENGES**

Having made the transition to the virtual world of eBusiness, the next challenge was to design a flexible learning space that encouraged information-enabled learners to eVenture in cyberspace. A fresh approach was required to develop the new concepts, principles and techniques needed to help learners look beyond the horizon, identify emerging and unfamiliar indicators of change and then use sound business acumen to generate strategic opportunities and sustainable eBusiness models.

This paper proposes to develop a customised learning and assessment space, built upon a tried and tested digital delivery system. It allows learners to move comfortably through time, space and place; transcend the limitations of national boundaries and the constraints of 'bricks and mortar'; and apply the new 'virtual' skill set of entrepreneurship, innovation, change management and creativity.
The diagram below shows the conceptual framework:

Assumptions

However, after examining the existing evidence and literature in general, and thought through some of the issues and challenges - it was obvious that many assumptions had been made about online learning or eLearning. The following are some of the main ones:

Assumption 1:

Administrative and teaching staff is capable of designing, creating, delivering and managing eLearning. For teaching staff, much of this responsibility falls upon the staff who has to deliver the course materials.

Assumption 2:

eLearning is economical/financial.

Assumption 3:

Other educational institutions are going onto the path of eLearning and therefore, should follow suit.

Assumption 4:

eLearning is what students and learners want.

Assumption 5:
eLearning is less work and easier (compared with the 'offline' mode) for teaching and administrative staff.

Assumption 6:

eLearning is better or more efficacious (compared with the 'offline' mode).

Assumption 7:

Undergraduate online teaching and learning is similar at postgraduate level.

Assumption 8:

To obtain a 'critical mass', supporters of online learning often argued that students/learners can be in any country (or any part) of the world. Here, often lies another assumption that there are no cultural barriers to language and other aspects of ethnic cultures (e.g. language - English is used universally and culture is Anglo-Saxon based).

Research Issues and Challenges

Based on some of the assumptions mentioned above, some issues and challenges arose. They point to the need for further research and some of the areas are listed below:

1. Comparative studies of 'offline' and 'online' learning are needed. What are the strengths and weaknesses of each? Integration of 'offline' and 'online' teaching and learning - what are the issues and how best to integrate them. What 'balance' to take - use a completely virtual strategy or partial virtual strategy (assuming online mode is desirable)? What are the factors that determine the strategy?
2. The ability of teaching and administrative staff to design, create, deliver and manage learning for a VLE. What knowledge, skills, qualifications and experiences are required? What are the difficulties and problems encountered by staff? What strategies to overcome them?
3. Financial costs and benefits of online teaching and learning.
4. If online teaching and learning are offered globally/internationally - what are the cultural differences and issues? How best to address them?
5. How well do students/learners take to ‘online’ learning and teaching? Do they favour ‘online’ over ‘offline’ learning and teaching?
6. Much of the research on tertiary online learning had been conducted on undergraduate students. How different are postgraduate students? There is a need to also conduct research on all aspects of postgraduate online learning and teaching.
7. Comparative studies of online learning between young adolescent students and mature-aged (often working) students. How different are they? How different (or similar) should they be treated in an online teaching environment?

CONCLUSIONS & FURTHER RESEARCH

• The development of Online Learning or eLearning is largely driven from the 'supply-side' - IT, Internet and the education industries.
• There is little documentary evidence that eLearning is any more effective than the traditional 'offline' approach. Neither is there research that indicates students/learners favour this mode of learning.
• There are many issues and challenges to be worked out. My general conclusion is that much critical research is required to fully understand what online learning means to academics, students/learners, governments and related interested parties and educational institutions.
• Further research is needed to ascertain the efficacy of using a virtual model of learning and teaching. Secondly, what new concepts, techniques and principles are required for teaching and learning at a postgraduate level in an online environment?
BIBLIOGRAPHY


Minoli, D., 1996, Distance Learning Technology and Applications, Artech House, Boston, USA.


Porter, L. R., 1997, Creating the Virtual Classroom: Distance Learning with the Internet, John Wiley, New York, USA.


APPENDICES

APPENDIX A - STATE OF PLAY ON CAMPUS

The following is a summary list of the 'state of play' of online undergraduate teaching/learning and "Learning Guides" in the various disciplines at the Swinburne Lilydale campus in 2001:

**Media**

Learning Guides for 2 subjects

CD ROM for all undergraduate subjects

CD ROMs in the making for Masters in Writing course

**Accounting**

Learning Guides

TechniCal Web Site

**Tourism**

Learning Guides
TechniCal Web Site for 2 OLA subjects

**Marketing**
Learning Guides (available online)

TechniCal Web Sites for all second semester subjects

**Management**
Learning Guides

**Psychology**
Learning Guides (available online)

TechniCal Web Sites for second Semester subjects

**Statistics**
Learning Guides

Web site including calculator and work book

**Sociology**
Learning Guides

LCL also has a web presence with their workbook

**Information Technology**
Elegant Solution Web Sites in Second semester
(In 2002 all subjects will be on Web CT)

**Economics**
Learning Guides

TechniCal Web Site for a couple of second semester subjects and OLA subjects

**Law**
Learning Guide

TechniCal web site
## APPENDIX B - ENTREPRENEURSHIP AT POST-GRADUATE LEVEL

<table>
<thead>
<tr>
<th>University</th>
<th>Postgraduate Subject</th>
<th>Other Programs</th>
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| Swinburne  |  • Strategic Transformation and Entrepreneurial eBusiness (taught from the Centre for eBusiness and Communication)  
   • Global Markets  
   • Entrepreneurial Strategy  
   • Strategic Intent in Enterprise Management  
   • Legal considerations in venture planning  
   • Entrepreneurship in corporations  
   • Growth Venture Evaluations  
   • Entrepreneurial Research Project  
   • Entrepreneurial Growth Project  
   • The Entrepreneurship Organisation  
   • Opportunity Evaluation  
   • New Venture Marketing  
   • New Venture Finance  
   • Creativity and Innovation  
   • Growth Venture Evaluation, are all available  
   • within the Australian Graduate School of Entrepreneurship (AGSE).  
   • This School offers a Graduate Certificate of Entrepreneurship and Innovation, Graduate Diploma of Entrepreneurship and Innovation, Master of Entrepreneurship and Innovation, and a Doctor of Philosophy (Entrepreneurship and Innovation).  
   • A Graduate Certificate of Business Administration, Graduate Diploma of Business Administration, MBA and DBA are also offered.  
   • Entrepreneurship : Opportunity-based Management can also be undertaken within the Doctorate of entrepreneurship: Opportunity-based Management can also be undertaken within the Doctorate of |  • Within the AGSE is the Australian Centre for Entrepreneurship and Innovation which annually conducts the Australian component of the Global Entrepreneurship Monitor (GEM). The GEM project provides a strong forum for public policy debate and development in all participating countries while building a rich and powerful data base of great value to scholarship and development of the discipline.  
   • Also within the AGSE is the Entrepreneurship Research Program focussing on the advancement of knowledge in the discipline of entrepreneurship including original research, supervising PhD candidates, publishing, developing a series of public seminars, and teaching.  
   • There is an Entrepreneurship Sub-Committee of the |
<table>
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<tr>
<th>Business Administration.</th>
<th>Joint Planning and Resources Committee to oversee the development and implementation of the Entrepreneurial University strategic theme.</th>
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<tr>
<td>• Entrepreneurship &amp; Innovation in Marketing is taught within the Graduate Diploma and Master of Business (Marketing).</td>
<td>• The Swinburne Venture Cup commenced in 2000, a business opportunity competition designed to give students a chance to develop ideas and win up to $15,000 in prize money. It encourages students to produce and develop a business idea in a realistic environment eventually presenting their business plan and pitching for venture capital.</td>
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