Teaching e-Commerce to i-Students in an a-Classroom

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ABSTRACT:

International students come to Australian universities for many reasons including the international recognition of course content, internationally recognised qualifications, academic quality, classroom facilities and the cultural experience. The challenge in delivering a unit in electronic commerce to international students is to ensure the course content meets the educational requirements, has relevancy for each of the visiting students and through open and free exchange of political, social, economic and cultural views, provides the opportunity for students to learn from each other within the global context. Teaching electronic commerce to international students in an Australian classroom where students are drawn from seventeen different nationalities requires a different, more innovative approach from the traditional teaching methodology. The approach introduced for this unit provides them with the opportunity to research topics from their national perspective, engage in cross-cultural dialogue, work in mixed nationality teams, present their findings within the classroom and become aware of the broader global issues of doing business-to-business and business-to-consumer commerce. Of particular importance is the high proportion of international students coming from the ASEAN countries, India, China, Asia and Pacific regions where trade using electronic commerce technologies is becoming a major feature within their boarders, and where people from their homeland will be looking to them for leadership and guidance on their return .

Figure 1: Countries of Origin

Nationalities	No. of Students
Australia	4
China	1
Fiji	1
French Polynesia	1
Hong Kong	4
India	8
Indonesia	1
Japan	1
Korea	1
Malaysia	1
Papua New Guinea	1
Singapore	1
South Africa	1
Switzerland	1
Tahiti	1
Thailand	2
Taiwan	12

INTRODUCTION

Roderick West in his report titled "**Learning For Life**" commissioned by the Department of Employment, Education, Training and Youth Affairs (DEETYA) into Australia's Higher Education System (West 1998, p47) stated, "the most important contribution that the higher education sector should make is to provide a learning environment that will enable its graduates to emerge with the skills and knowledge that will meet the economic, social and environmental challenges of the twenty-first century".

With the emphasis on the student and meeting their needs, the focus has been on providing a high quality learning experience with the design and method of delivery aimed at providing learning opportunities that assisted the student in maximising his/her potential through participative learning curriculum. West also reported that "in 1997 there were more than 63,000 international students studying in Australia and this number is likely to grow". p64

The importance of discussing issues from a global perspective is evident when we see the volume of trade between Australia and our regional neighbours. The Australian Bureau of Statistics figures for July 2000 on Australia's imports and exports to countries within in Asia and Pacific, China and other ASEAN (Association of South East Asian Nations: Indonesia, Malaysia, Philippines, Singapore and Thailand) countries. Australia's exports totaled $6084m (5432.0.65.001 International Merchandise Exports, Australia TABLE 2. Exports to Selected Countries and Country Groups), while our imports of $5221m (5439.0 International Merchandise Imports, Australia TABLE 3. Imports from Selected Countries and Country Groups, Customs Value).

Figure one shows the nationalities and number of international students enrolled in the Undergraduate Electronic Commerce unit offered by the Central Queensland University through the International Campus in Brisbane, Queensland, Australia.

For most international students, the command of the English language, and in particular trying to read a textbook and case studies written in the Australian context is foreign and hard to comprehend in a twelve-week course. Although international students are required to have passed an English language test to gain acceptance into the course, they take time to adjust to the Australian accent, the speed and style of speech as well as our idiom and abbreviations which are not familiar to their culture.

The unit profile for the Electronic Commerce from the Faculty of Informatics and Communication aimed at undergraduate students with no prerequisite units states, "It is intended to teach you about electronic commerce (EC), but also to make you citizens of a virtual community and active members of virtual teams. As such, it very much represents learning by doing" p2. Students undertaking this unit are drawn from Bachelor courses in Infor-

mation and Technology, Internet Communications and Electronic Commerce, and as an elective from the Bachelor of Business and Bachelor of communications courses.

While the prescribed text Lawrence, Corbitt, Tidwell, Fisher & Lawrence (1998) 'Internet Commerce, Digital Models for Business', John Wiley & Sons, Singapore is suitable for the Australian classroom with Australian students as it based on the Australian and New Zealand environment, it has little relevance to international students apart from gaining an insight on how electronic commerce is treated within the Australian context. Observations within the classroom shows students have little motivation or incentive to study e-commerce where case studies refer to Australian or American companies, and the majority of web sites and references come from Australian and Unites States of America.

To make the content more relevant and obtain first hand knowledge of the topics and issues as they affect their own nationalities, each of the chapters within the textbook were first introduced into the classroom within the Australian context before students researched and presented the same topics from their own nations perspective.

THE CURRICULUM

The University Of Central Queensland 2000 Handbook for undergraduate courses describes the unit in Electronic Commerce as:

> "an introduction to electronic commerce – a term which means the sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunications networks. The unit explains what electronic commerce is, what are associated security issues, business strategies and management issues, and examines pertinent technology standards and protocols. Students undertake indepth study and a project in one of four areas of electronic commerce: (i) marketing, (ii) legal and security concepts, (iii) purchasing and supply, or (iv) new technologies such as software agents and networked multimedia databases. Access to the Internet is required for this unit". p45

The broad curriculum outline provides a high degree of latitude to modify the course structure and delivery to meet the learning needs of the student group. With a classroom of international students, this translated into a learning centered/experience approach aimed at maximising the life experiences of the international students as well as providing them with the opportunity to carry out more research on their nations laws, cultural and economic policies and learn how globalisation is influencing commerce in their home country. Since each international student is in Australia on study visas until he/she has completed their course of study, this in an excellent opportunity for them to gain a working knowledge of globalisation and its affects on countries doing trade within the ASEAN, Asia and Pacific regions and beyond.

THE UNIT STRUCTURE

To be successful in the unit, students have to satisfy three components of the course:

- A closed book examination at the end of the semester based on the topics included in the textbook (50%)
- Working in mixed nationality groups, each group selects one topic from the textbook and present their research material in one of the nine weekly presentations of 45 minutes duration (23%)

- Using a prescribed criteria-marking schedule, each student will critique all of the other eight weekly presentations excluding their own presentation. In addition, this will be followed up with a tutorial and discussion session in the computer laboratory where groups of students, either in their presentation group or working with students of the same nationality, carryout research on questions arising from the presentations and/or discussion. Students have access to a computer lab with Internet connection. Their findings are presented in report format listing the web sites used for referencing and the whole report emailed to the lecturer (27%) at the end of the tutorial session.

Figure 2: Course Structure

Week	Lecture Topic	Tutorial/Computer Lab	Group Presentation
1	**Formal Lecture:** • Introduction to Internet Commerce	• Email • Research methods, e-journals, publications	No group presentation
2	**Formal Lecture:** • Business Models for Internet Commerce	• Elements of a WebPages • Portals	No group presentation
3	**Formal Lecture:** • Technology Basics	• Discussion and research questions based on the topic and presentation	**Group 1:** Business Models for Internet Commerce
4	**Formal Lecture:** • World Wide Web Commerce	• Discussion and research questions based on the topic and presentation	**Group 2:** Technology Basics
5	**Formal Lecture:** • Electronic Payment Systems	• Discussion and research questions based on the topic and presentation	**Group 3:** World Wide Web Commerce
6	**Formal Lecture:** • Security Issues, Networks and Electronic Commerce	• Discussion and research questions based on the topic and presentation	**Group 4:** Electronic Payment Systems
7	**Formal Lecture:** • The Internet Customer	• Discussion and research questions based on the topic and presentation	**Group 5:** Security Issues, Networks and Electronic Commerce
8	**Formal Lecture:** • Organisational Communication	• Discussion and research questions based on the topic and presentation	**Group 6:** The Internet Customer
9	**Formal Lecture:** • Taxation of Internet Commerce	• Discussion and research questions based on the topic and presentation	**Group 7:** Organisational Communication
10	**Formal Lecture:** • Legal and Ethical Issues	• Discussion and research questions based on the topic and presentation	**Group 8:** Taxation of Internet Commerce
11	**Formal Lecture:** • Globalisation, World Trade and the Digital Divide	• Discussion and research questions based on the topic and presentation	**Group 9:** Legal and Ethical Issues
12	**Formal Lecture:** • Future trends • The need for a new Integrate Business Model for SME's	• Discussion and research questions based on the lecture	No group presentation

Figure 2 indicates the order in which the topics are presented in the one hour formal lecture as an introduction to the topic within the Australian and global context, content covered in the two hour tutorial/ computer lab session, and the order for group presentations.

Two additional topics not included in the textbook were introduced as formal lectures and tutorial sessions:

- "**Globalisation, World Trade and the Digital Divide**" are issues having tremendous importance to the international students given the growth of electronic commerce within these regions and the visit be industry and government heads of State to the World Economic Forum held in Melbourne, Australian during September 2000.
- "**The Need for a New Integrated Business Model for SME's**" as small-to-medium enterprise organisation comes to terms with the change process required to enter and be successful in electronic commerce in both the local and global marketplace.

As this unit has no prerequisite units and could be the first unit any international student has undertaken in an Australian university, the first two weeks were set aside the explain the unit structure, student and lecturer expectations, forming working groups with no two people of the same nationality in the same group. This mixture ensured cross-cultural communication and appreciation of each other's points of view and contributed to their learning experience.

TEACHING METHODOLOGY

Barr and Tagg (1995) support the concepts of a shift from an instructional paradigm that focuses on teaching, to one where learn-

ing is the major concern. Throughout this unit a learner centered/experience approach (Cleary, 1992) was adopted to ensure students gained maximum knowledge from the topics concerning electronic commerce from a globalised perspective. In this model, the personal growth of the student/learner is gained due to the high level of student involvement in research, content, and presentation with little emphasis placed on teacher direction unless requested. This model reinforces teacher as facilitator there to assist students come to terms with the English language and its translation, research methodology, preparing presentation materials, organisation within teams whose members came from different cultures and language, and familiarity with computer resources in the computer laboratory.

The lecturer/tutor is there for the purpose of structuring activities, assignments and lessons which incorporate aspects of critical and creative thinking which builds upon the students abilities, interests, experiences and background knowledge to equip them with the tools for life-long learning. As a side benefit, the teacher also becomes the student, learning from the student as teacher.

The key educational outcome in this teacher/learning model is empowering the students within each group to identify issues and events according to their social, political and economic needs and interests in line with broad topic areas. In this way, cooperation and communication at a much higher level of learning and understanding takes place between students of differing nationalities and has a lasting effect on each student. Other lecturer's within the university have commented on the positive effects in their classes due to the increased level of dialogue that is occurring between the international students as a direct result of this innovative approach.

For the Australian student this approach is familiar as they have been raised in the concepts of personal skills development, self-directness, assertiveness and problem solving. However for many of the international students, this method is foreign to their culture and are more inclined to be passive listeners throughout the lecture series, group presentations and tutorial session. The majority are not prepared to openly question points of view raised in the lecture or tutorial, nor are alternative points of view as their approach is to place a high value in what is being taught (teacher has the knowledge), rather than what can be learned through self empowerment and self direction.

Stephen Covey describes this phenomenon in his book 'The Seven Habits of Highly Effective People (1989) as 'Design or Default' and if we are to provide people (students) with the opportunity to develop leadership qualities instead of management characteristics, then we need to take a leadership role ourselves (teachers) so that we don't perpetuate existing roles where we;

"empower people outside our circle of influence or circumstances to shape much of our lives by default. We reactively live the scripts handed to us by family, associates, other people's agendas, the pressures of circumstance – scripts from our earlier years, from our training, our conditioning".p100

While Carl Rogers (1969) suggested that learners must be trusted to develop their own potential and be encouraged to choose both the way and direction of their learning. In formal education, self-empowerment and direction needs to be supported by a structured framework with the sequence of presentations for all groups formalised following the topics listed in the textbook. No latitude was made available for student groups to negotiate alternative presentation times due to the timeframe so all student groups had to follow the set timetable.

Where a learner centered/experience model is implemented one would expect a high educational standard in all areas of the unit including content, presentation and participation. These students were no exception, and the assessment component for the presentations was extremely rigorous as students were given additional responsibility to mark each others group presentations using a seven point sliding Likert scale detailed on marking criteria sheet. Presentations were marked on the following points:
- speakers appearance and first impression
- presentation structure
- coping with questions and facilitating discussion
- delivery
- visual aids
- content level suitable for target audience

Students were provided with a detailed explanation on each of the marking criteria and was fully explained to the group before each presentation commenced so they understood what they had to do. When the final marks were tallied for each presentation, the variation between the average mark from all student evaluations was between 1 or 3 percentage points from that allocated by the lecturer.

It can clearly be learned from this experience, that where students are empowered to work independently and also within cross-cultural groups rather than being directed by their lecturer/tutor, their specific issues and needs are addressed. In addition, same cultural groups were established for specific activities providing an opportunity to work through problems and issues from the same cultural perspective. This provided new insights for same cultural groups as difference also exist between people from the same country.

GROUP PRESENTATIONS

The level of critical and creative thinking exceeded expectations with students within their groups able to generate ideas for their presentations at a very high level. The depth of content in the presentations provided students with many examples and points of views which stimulated cross-cultural conversation which would have not been possible unless students were given the opportunity to research topics from their own national perspective.

Key points of national interest which contributed to the level of discussion:
1. the need for movement of many countries into an information age and be part of a global village and the requirement to revise existing laws and policies away from a purely nationalistic approach toward a more open style is hard for some people to understand as it is not explained very well to them
2. there is still considerable Internet warfare between Mainland China and Taiwan where hackers insert text messages into opposing sites aimed at causing tension between the two sides over their differing political ideologies
3. standards of telecommunications infrastructure, ISP's and lack of internal controls are hampering international efforts on security and control as nations perceive threats differently, and many nations do not have the financial resources or political will to effectively stop hacking
4. the effects of currency fluctuations on a countries national economy by world investors, especially when contracts are negotiated in American Dollars which can sometimes increase debt levels and make matters worse
5. the introduction and successful use of electronic payment sys-

tems varies drastically between nations providing the customer with many, or no options to pay for goods and services across the Internet. The development of a new payment system called Common Electronic Purse Specifications (CEPS) being trailed in Taiwan

6. within developing nations hindrance to B2B and B2C commerce on a global scale rests with governments as they are responsible for the quality and access to a reliable telecommunications backbone

7. introduction of an education program to improve the peoples levels of computer literacy and access to community access point to connect to the Internet

GROUP DISCUSSIONS

During the weekly discussions as well as the email responses to questions posed during the lecture, presentation and tutorial sessions, there was a consistent theme evident and needs to be addressed by people within the circle of influence of electronic commerce adoption at a global level if acceptance and use of Internet technology is to be achieved.

For the teacher in the classroom, this has significance as we have a direct influence on the design of our course units, what topics are to be included, structure of the classroom, teaching methodology, setting of textbooks, what reference materials are to be used and the assessment process. Areas of concern to international students include:

1. The use of acronyms and western terminology commonly used in electronic models, textbooks, discussion papers and displayed on Internet web sites as the meaning of words, concepts and symbols take on a different meaning from one culture to culture another and in many cases, cannot be easily transposed

2. The World Wide Web is comprised of communities with different policies, personalities, value systems, customs and cultures and western influences should not shape the nature and operation of the web.

3. People from more developed societies should pay more attention to the needs and wishes of less developed countries as no one has yet come up with a model for a successful global community

4. Teachers of electronic commerce need to incorporate aspects of other countries social, political, economic, trade laws, employment, physical infrastructure, health and literacy issues in any course which discusses trade from an globalised perspective

5. Discuss issues of language barriers and what can be done to assist people using web sites to navigate without the reliance of English, which for many people in the world, is not even a second language

6. Improve community awareness of the role of multinational and transnational corporations and be careful when writing media statements of the way these companies do business in developing nations as people within these communities look to these corporations as the means of improving their life styles, provide education and training, improve services and entry for national business to enter global markets

7. Help developing nations through our circle of influence by improving their bargaining power over the might of the superpowers who set the rules, adjudicate disputes between trading nations, but don't abide by laws they set themselves, e.g. dumping of over supplied commodities

While individual lecturer's/tutors may not be in a position to address all these concerns listed above, they are in a position to raise international concerns within their own circle of influence

and be responsible for the content, attitudes, belief systems they present in their classroom as well as in the discussions that take place in the staff room, faculty meetings, and in the materials they write for journals.

INTERNET SITES OF INTEREST

The following Internet sites are representative of those supplied by students during their research activities, used to develop their presentations, student handout materials, and to support tutorial activities.

www.mdc.com.au
www.cyber-jaya.com
www.pngnetsearch.com
www.mana.pf
www.webmoney.ne.jp
www.appuoline.com
www.indiacommerce.com
www.hongkong.com/anitspam.html
www.worldecom.org
www.webmoney.ne.jp
0www.fijivillage.com
www.rediff.com

CONCLUSIONS

The goal of introducing an innovative approach to teaching electronic commerce to international students in an Australian classroom was to change the paradigm from the traditional teacher centered approach where the teacher decided what the student was going to learn, what information and facts the students were going to hear, read or research, to a student centered approach where it became conducive to learner centered/experience.

Students were self motivated and demonstrate levels of critical and creative thinking since they had control of materials presented by their group, set the questions for the discussion sessions, and able to apply issues relating to electronic commerce within the global perspective to their own culture.

Through working with students from other nationalities in their presentation groups and being actively involved in classroom discussion sessions, the content becomes more meaningful as topics and issues could become relevant to their national perspective. Being active participants rather than passive listeners, everyone gained new insights as cross-cultural electronic commerce concerns were openly debated resulting in well-equipped students for life-long learning skills. This process has broadened their perspective of doing business-to-business and business-to-consumer across boundaries where the political, social, economic and cultural views are so different to their own.

REFERENCES

Ballard B. & Clanchy J. (1997) *Teaching International Students: A brief guide for lecturers and supervisors*. IDP Education Australia, Deakin.

Barr, R.B., & Tagg, J. (1995). From teaching to learning. *Change, 27*(6), 13-25.

Biggs, J. (1997) 'Teaching Across and Within Cultures: The Issue of International Students' in *Learning and Teaching in Higher Education: Advancing International Perspectives*. Proceedings of the Higher Education Research and Development Society of Australasia Conference, 8-11 July 1997, pp 1-22.

Cleary, R. (1992), 'Models as an effective research tool' in Cavanagh D M & Rodwell G W (eds) *Dialogues in Educational Research,* Darwin NT Australia, William Michael Press.

Cover, S. (1989), 'The Seven Habits Of Highly Effective People', Simon & Schuster, USA

Fielding A J & Cavanagh D M (1983), 'Five attributes of the curriculum' *Occasional Paper Series* , 2, University of Alberta, Edmonton

Hofsted G. (1986), 'Cultural Differences in Teaching and Learning', International Journal of Intercultural Relations, Vol. 10.

Rogers, C.R. (1969). *Freedom to learn.* Columbus, OH: C.E. Merrill.

Understanding the Common Essential Learnings**,** A Handbook for Teachers located at http://www.sasked.gov.sk.ca/docs/policy/cels/index.html

Wagner, E.D., & McCombs, B.L. (1995). Learner centered psychological principles in practice: Designs for distance education. *Educational Technology,* 35(2), 32-35.

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