'Globalscapes: The design of on-line seminars using complex virtual teams in the global classroom .

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Abstract

The paper reports on a three years pilot seminar project involving four universities. Two of these are in the United States and two are in South Africa, one is a historically disadvantaged university, the other a historically advantaged university. The multicultural and multidisciplinary virtual seminars explored the topic of globalisation. Advances in information technology have made it possible for students and lecturers in advanced and less advanced industrialised countries to participate in cutting edge interactive courses and virtual seminars, which span different time zones, continents, cultures, relationships and technologies. All participants have to adapt to new circumstances to achieve the virtual seminar objectives. Experimenting with such groundbreaking learning environments and techniques is a relatively rare experience at present for cyber students and cyber teachers. The perspectives of participants from urban universities differ considerably from those in rural universities in less industrialised countries where exposure to information technology is uneven and often fairly unsophisticated. The nature of the research generated in such global classrooms reflects the diversity of experience of the participants.

1. Introduction

The flexible and individualized knowledge economy of the Internet is seen as the key to the future of all higher education (Daniel, 1996 in Hall, 2000). Castells argues that as the network society continues to grow, the Internet will become the universal tool of interactive communication, and information technology will enhance and accelerate the production of knowledge and information (Castells 2000b in Hall, 2000). The trend nowadays is to establish "virtual universities" leading to "borderless education" characterized by a customer-focused approach to education and training and by the dissolution of boundaries between public and private institutions. (Hall, 2000)

Between 1995 and 1998, distance education programs in the US increased by 72% and by 1998, 1680 institutions were offering some 54 000 online courses to an enrolment of 1.6m students. The National Center for Education Statistics found that an additional 20% of institutions intended to offer distance education courses in the near future. It seems probable that the use of the Internet will soon be universal in US colleges and universities (National Center for Education Statistics, 1999).

First requirement for the virtual university is the access to the Internet. Given the "digital divide" between developed and developing countries, colleges and universities in Africa are unfortunately on the wrong side of the divide, and risk being left out in this new revolutionary reinvention of learning institutions (Hall, 1998).

2. Practical Design of a Virtual Seminar

Globalisation and Information Society (GIS) Seminar

The Virtual Graduate Seminar on Globalisation and Information Society (GIS) was developed and conducted by Professor Derrick L. Cogburn (www.si.umich.edu/~dcogburn), in collaboration with professor Dan Atkin and Vlad Wiebelbut from the University of Michigan's School of Information. The technological aspect of the seminar is sponsored by the Alliance for Community Technology (www.communitytechnology.org), and the Kellogg Foundation provided the financial muscle

The virtual seminar was based on the assumption that the world system and global economy are facing a fundamental restructuring and an on-going process of globalization leading to the development of a knowledge-based Global Society. The course was designed to provide learning opportunities for students interested in the converging interdisciplinary fields of information systems, broadcasting, information and communications technology (ICT) and international communications policy by breaking the boundaries of space, time and distance.

The second pilot seminar in 2000, initially consisted of 35 culturally diverse students in a global classroom, 10 from the University of Michigan School of Information (UMSI), 10 from the American University in Washington (AU), 10 from the University of Witwatersrand (Wits) School of Public and Development Management in Johannesburg South Africa, and 5 from the University of Fort Hare (UFH); an HDI from Alice, a rural area of the Eastern Cape in South Africa (Authors of this paper are from Wits University).

At the beginning of the semester, each participant in the seminar was randomly assigned to a global collaborative research team called Global Syndicates (based on the syndicate approach used at the University of the Witwatersrand). Each Global Syndicate consisted of 7 members (2 from each university and 1 from UFH). Each Syndicate was assigned one of the five stakeholder perspectives; (1) global private sector; (2) international organization; (3) developed country national government; (4) developing country national government; and (5) non-governmental organization. While the seminar took a global approach, emphasis was placed on the responses of Africa and the developing world.

2.1. Technology Used in the Virtual Seminar

The virtual seminar employed a suite of web-based tools to create a globally networked collaborative learning environment and used a multimedia approach. The presenters could

be in any location in the world with Internet connectivity, and could speak into the microphone and engage the audience using a variety of tools. Presentations included, interactive audio, live Web sites and other applications. Audience members could pose questions off-line or pose the question to the entire seminar.

The virtual research teams (Global Syndicates) would sit in the audience and ask each other questions during the lecture (At one stage the facilitator was presenting a lecture in Cairo, Egypt and the co-author Mvulane was in Italy whilst the rest of the audience were in South Africa and the US!). The presenter, could poll the audience with pre-developed questionnaires, surveys, or quizzes, and could gauge the "temperature" of the audience, in terms of their current understanding of the lecture, and feelings about pace (too fast, too slow), etc.

2.2. Academic and Technology Pre-requisites

The seminar was technology-intensive and required the use of numerous ICTs. All students in the seminar were required to have access to the Internet, an e-mail account and possess a functional knowledge of the following ICT tools which could be accessed by following links from the seminar website:

PlaceWareTM

This is a real-time courseware used to "attend" the weekly lectures.

It offered:

- Real-time audio and text synchronized with enhanced PowerPoint slides used to give a presentation
- Live web components and links including Java animations
- Real-time questioning and polling of students; and
- Web-based polling of participants.

WebBoardTM

Used by virtual research groups (Global Syndicates) and the facilitator for the "out of class" discussions and communication.

Xerox Docushare TM

Used by Global Syndicates for sharing documents among themselves, and electronic submission of assignments and research projects documents to the facilitator.

<u>Microsoft</u>TM <u>NetShow</u>

Used as a course archive for:

- Archived lecture presentation (PowerPoint with synchronized audio)
- Web-based courseware and study-guides
- Web-based background reading, and
- Library of background material and Internet link (including Java animations)

To support the learning needs of the seminar, a Virtual Study Center (VSC) was developed on the Web for participants to access recommended reading material.

Mirabilis ICQTM or AOL Instant MessengerTM

Used to chat on-line with the facilitator during virtual office hours.

3. Complex Virtual Teams: Global Research Syndicates

The complex Virtual teams were constituted as Global Research Syndicates, members were randomly assigned to syndicates by Professor Cogburn. The syndicates consisted of 4 or 5 members with at least one member from each of the participating universities. The syndicates were as even matched as possible for gender and multicultural diversity although one group consisted entirely of women.

3.1. Different experiences on Globalization and Information Society Seminar in South African universities.

In the **urban environment** of Wits University, the experience of the on-line Globalization Seminar was exhilarating, exciting, novel and frustrating. All the students were postgraduates; all except two of them registered in the second-year of a Master of Management degree at the School of Public & Development Management. Two postgraduate students registered for the course for non-degree purposes. Only three South African students in the class were technologically sophisticated; the rest came to the course knowing how to use word processors, spreadsheets, access the Internet and a few knew how to use graphic packages.

The course generated great excitement because the course developer and leader, Professor Derrick Cogburn, in the School of Information at University Michigan, spent the first five weeks of the course of the Wits Campus, training technical staff and student and marketing the course to the Dean of the Management Faculty, the sponsors of the Vodacom Link Centre and various other interested parties. He also spent some time with local and US based representatives of the donor funding agency, Kellogg Foundation, and introduced them to staff and students at Wits.

Once the course had started, students were allocated to their global syndicate groups and trained in the use of the technologies which would be used during the course. For most students this meant a period of intense learning to achieve some basic mastery of the technology before they were reasonably comfortable. There was very little time between the training period and the first assignment in which students had to demonstrate their proficiency in the use of PowerPoint during their first on-line presentation to their global classmates. The presentation was an individual introduction by each student of him/herself to the whole group. The dropout rate at Wits after this assignment was quite large – three students from different syndicate groups withdrew from the course, one for reasons of ideological incompatibility with other members of the syndicate.

There was a great deal of interaction in real-time in the virtual classroom in time allocated for discussion of group projects at the end of each synchronous session. Groups

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experienced several levels of frustration – mostly with the technology when they could not talk directly to each other and had to resort to text-based chat.

During the preparation for the first group assignment, there were many meetings of students in the same syndicate groups locally out-of-class, some virtual meetings to discuss the assignment, but these were restricted by limited access to the computer labs on various campuses and limited home or office access to computers for some students. The time difference between Eastern Standard Time and South African time is seven hours (or eight hours during daylight saving) and this needed to be taken into account as well. For students in South Africa the sessions followed a full day's work from 17:30 – 21:30. American students had the synchronous session at 10:00.

As students became more proficient at the use of the technology, they made less use of outof-class meetings and relied on email, Docushare and WebBoard to organise and coordinate their group projects. Ease and facility of use of the technologies improved rapidly after the deadline for the first group assignment and technical difficulties were sorted out with the help of the professor and/or course co-ordinators.

The support of the course co-ordinator at Wits was wholehearted during the first few weeks of the course but the support became inconsistent and less effective as the course progressed. The co-ordinator scheduled lectures during synchronous seminar sessions and eventually support was minimal. Students in the laboratories found this unacceptable as the technical support staff were unable to provide sufficient support either. The workstations were not logged on early enough, once the server was serviced and the hard-drive crash which resulted meant that one synchronous session had to be abandoned and students had to drive to their homes, offices or internet cafes to log on and attend the session. Consequently, some students missed the session completely. No postgraduate students were involved at all.

The experience in the **rural university** has quite different. The five "students" were in fact University of Fort Hare staff members. They joined the global seminar several weeks after it had commenced and missed the first two assignments. They introduced themselves to their syndicate members by email and by limited conversation during synchronous sessions. This was fraught with frustrations because of poor connections and bandwidth problems between University of Fort Hare and American University. There was much less interaction simply because of the small number of people involved and their restricted ability to interact with syndicate members on-line. They had problems accessing the Virtual Study Centre and downloading the readings. They also had limited sporadic access to other Internet sites for research purposes.

They attended less than a third of the synchronous seminar sessions, communicated with syndicates by email, and did not participate in the on-line presentations of the final assignments. This was immensely frustrating for University of Fort Hare and disappointing for their global syndicate colleagues who really valued their 'developing world' perspective on the issues being discussed in the course. Their potential for enriching the course for all participants was never fully realised.

3.2. Critque of the course content from a 'South' perspective

Globalization was discussed from a number of points of view by the syndicates which were culturally diverse. However the students in the 'North' at US universities were more

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culturally diverse in terms of nationality than the students in the 'South' at South African universities. The students in the 'South' were almost all South African although they came from different racial and cultural groups.

The course content was heavily weighted by the perspectives and theories of writers from the North, like Castells. There was very little theory or even argument or comment from writers in Africa. The pilot group that the authors were in was the second such pilot, but at no time was the contribution of the previous group of Southern students acknowledged and there did not appear to be any curriculum development or course modification which took more account of their perspective or experience. None of their findings or readings which they had discovered was included in the reading for the second pilot. The input from Southern students into the development of the course and its content was missing. Although there is great emphasis by Castells on the exploitation of the South by the North and the dire need for the South to catch up or be left behind, the course itself appears to have done little to redress the gap or even increase awareness of it in the literature. All the South African sources cited in this paper were identified by the authors in their own research although many of the sources were available during the second pilot.

It must be said that on an individual level, Southern students were aware of being on a very steep learning curve in learning about the process of globalisation and the increasing impact of it worldwide, and this in itself is an advantage for communities in the South. Prof Cogburn needs to be commended on the inclusion of students from the South to lessen the impact of exclusion and to broaden the perspective of students in the North. Members of the various syndicates in the Southern teams had tremendous difficulty in making any impact in terms of the research areas within the syndicate groups. The syndicate group which covered the role of multinationals in globalisation could not get consensus on whether a US-based multinational should be used as the focus of research or whether another multinational should be researched. Long and heated debate in real time during the first weeks of the course resulted in a deadlock as the Northern students hardened in their decision to study a US company because of easier access to information about it. The lack of a desire to accommodate the Southern perspective resulted in great tension in the group, and the loss of two South African students who felt so discounted that they dropped out of the course within the first three weeks.

Prof Cogburn had set up very strict rules for the submission of assignments on the understanding that this would ensure that students received timeous evaluation and feedback on their work. However, students at Wits found it frustrating that once he was out of the country he was difficult to access, he was tardy in replying to e-mail queries about the promised feedback and students were left feeling let down and abandoned. Several students had to engage in lengthy discussions and reminders to him about assignments which he did not receive despite their compliance with deadlines and the technological hitches

4. Conclusion

In a world of increasing globalization of higher education, the use of information technology in education offers many exciting and challenging opportunities for academic staff development. Academic staff may become involved in the innovative synergistic use of technology to enhance courses offered on-line and achieve greater congruence between the course material, subject knowledge and new technology. Academic staff may find the management and maintaining of complex virtual teams and research syndicates and

enriching and stimulating experience for themselves and for their students. The inclusion of students from the North and the South in virtual classroom can have enormous impact in broadening awareness of issues far from home and how these impact on the globalisation process and life at the local level. Greater understanding of many other cultures and working styles may result, prejudice and stereotyping may diminish and greater cooperation and working together may result.

As academic staff become more comfortable with the use of technology and working with students in synchronous and asynchronous situations, they may find that they are able to integrate interactive technology in may more courses and learning situations than is the case at present, provided that the pay-off in terms of student learning is greater than that achieved in present asynchronous on-line courses.

There is also enormous potential for academic and other staff to engage in service learning in their courses and foster interaction between students at universities in developed countries and those in developing countries across the digital divide. More of these activities and projects may reduce the marginalization of students in developing countries. International agencies can be a catalyst for the enhancement of technological co-operation between North and South and provide practical and far reaching interventions in bridging the digital divide in advance and less industrialized countries.

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