INTERNATIONAL COLLABORATION
IN GRADUATE DISTANCE EDUCATION

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Introduction

During the past decade, distance educators have argued that a sense of mastery (of content) and community (with other distance learners, and with tutors) are both outcomes which electronic interaction can provide and support (Davie & Wells, 1992). For the latter objective to be achieved, a change in roles for both the teachers and students is required - the students becoming more active, and the teachers more facilitative and guiding than preemptively directive, dependent upon the learners' individual needs and preferences (French, Hale, Johnson & Farr, 1999). The issue for distance education (DE) is how to provide more facilitation and guidance, permitting and recognizing increased learner empowerment, while also providing the levels of structure required for learning (Baggaley, 1999; Moore, 1993). As with most other

aspects of the field of distance education, the issue is at least partially addressed by the constant advances in technologies for online interaction and collaboration.

Types of interaction

Development and investigation of Moore's theory of transactional distance has shown that there is a complex interaction between structure, dialogue, and tutor-moderator presence in course-based interaction. Prior learning, the types of media available for interaction, the nature of the task and the time available to address it, and individual differences in learning style, all affect learners' responses to the presence or absence of opportunities for interaction, and their preferences for different types of 'presence' of the teacher and other learners (DeSanctis & Gallupe, 1987; Threlkeld & Brzoska, 1994; Garton, Haythornthwaite, & Wellman, 1997; Chen & Willits, 1998; Koufman-Frederick, Lillie, Pattison-Gordon, Watt & Carter (1999). While the above and other variables may affect outcomes, there is clear evidence that online communications, as a basis for collaboration, can be effective (Walther, 1996).

In many post-secondary distance education situations, synchronous and asynchronous modes of interaction are available, particularly Internet- and video-based (U.S. Department of Education, 1999); and there is strong evidence that many users value the interaction they experience in face-to-face, classroom-like environments (Vaas, 2001). While the convenience of asynchronous interaction is acknowledged, contact with a 'live, human instructor' is important for many users.

Global collaboration online

Athabasca University's Centre for Distance Education (CDE) offers a Master of Distance Education program (MDE), and an Advanced Graduate Diploma in Distance Education Technology (AGDDET), both completely delivered at a distance. The MDE program attracts students from around the world. As part of their coursework, all students use asynchronous communications (text-based computer-mediated conferencing, and e-mail). During the past three years, however, faculty have become aware of an expressed interest - even a need - among the students for a greater immediacy than asynchronous communication afford. Evidence of this need is the satisfaction expressed by many students when they have the opportunity for synchronous voice interaction - for example, a telephone or online audio discussion with faculty members and other students.

Currently, the number of competing online tools for live (synchronous) interaction is proliferating, making the task of product selection a complex and often hit-and-miss affair. To deal with this problem, an ongoing series of software evaluation studies is conducted by the CDE's faculty and students, comparing internet text-based, audio, video, and polling approaches. These experiences have shown that cost-free synchronous interaction is possible in both audio and video, with generally high-quality reception and reliability, and that it generates an enthusiastic response in a growing proportion of the students, who do not object to sacrificing some of their spare time in order to experience synchronous, voice-based interaction with others.

A major priority of Athabasca's MDE faculty is to foster collaborations with other institutions and programs that also train distance educators and researchers. Since 2001, the CDE has been funded by the Social Sciences & Humanities Research Council of Canada (SSHRC) to promote collaborative research with overseas universities, including the University of London, the British Open University, the Universities of Sheffield and Derby, and the Royal Institute of Technology, Sweden. The partners have initiated a series of online audio conferences which has attracted participants from the above countries, from all parts of Canada, and from the US, Egypt, Australia, and Dubai. Many of the project partners and their students also came together for the 1st International Symposium on Educational Conferencing, held in Banff, Alberta earlier in 2002. Numerous cultural differences in the types of system used for distance-based collaboration have been revealed by these international discussions. The online seminar series is to be expanded in January 2003 (contact the authors for details).

Lessons and implications

Part of the rationale for the above activities is that Canadian student researchers need to acquire an understanding of the research agendas and methods of other educational cultures. New, cost-free tools such as live internet audio are valuable methods for linking the participants. The online audio sessions have been successful in making introductions, and in allowing students to speak to their peers and to guest experts about their research interests.   The intention and expectation is that, having 'met' each other online, international educators and researchers will learn from each

other's strengths, discover commonalities, and develop fruitful research collaborations at a distance. Discussions frequently go well beyond the time allotted (two hours), even though for some of the overseas participants they are taking place in the middle of the night. It is interesting to note that on some occasions students in the same overseas institution have met each other for the first time in these online sessions, even though they may be registered in the same program, attend the same campus, and live near one another.

Whether enduring and valuable research collaborations will result from these interactions remains to be seen. It is clear, however, that:

- Online synchronous audio is an effective means of providing synchronous interaction opportunities to a widely distributed (worldwide) audience.

- Cheap (and even free) audio-conferencing programs provide high-quality audio, though may not provide security, permanence, technical support or features that other, higher-cost packages offer.

- The experience of speaking about their interests and their research with a global audience of peers and experts is highly valued by students who participate in the synchronous sessions. For some, this type of interaction appears to provide an element that has been lacking in North American DE studies hitherto.

The Calgary conference presentation illustrated the above issues, and the international

differences in educational delivery that must be addressed in order to stimulate

educational collaboration at a global level.

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communication issues

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Athabasca University

- Canada's Open University since 1971
- 100% distance education delivery
- 'open learning' philosophy
- rapid increase from 12K to 30K students since 1996
- 800+ distance-based courses
- 500+ courses delivered currently
- 200+ courses under development
- All programmes were online by 1999

DE institutions and collaboration

- Distance education institutions rely increasingly on national and international course-sharing agreements.

- DE institutions have addressed the problems of technological delivery since their inception.

- Local examples of collaboration include:
  a) Canadian Virtual University; b) Univ. Virtuelle Francophone; c) Athabasca U/ TELUQ; d) Western University Governors; e) Commonwealth of Learning

- A prime example of Canada/Mexico DE collaboration: UBC and ITESM.

Online technologies at AU

	Asynchronous (*all MDE students*)	**Synchronous** (*approx. 40%*)
Text	**E-mail** **Conferencing** **Relay chat** **File transfer**	**Simultaneous Chat** (*diminished interest in past 2 years*)
Audio	**Sound files** **Streaming Audio**	**Internet 'phone** **Audio-conferencing**
A+V	**Movie files** **Streaming A+V**	**Desktop video-conf.** (*increased interest*)

DE in other countries...

1) In *Mexico*: sophisticated satellite-based multi-way video-conferencing

2) In *Japan:* distance education based on elaborate satellite-based broadcast models

3) In *China*: Chinese Radio-TV University now putting all its course materials online

4) In *Bangladesh*: Video remains major medium for rural delivery of courses

5) In *India*: IGNOU's major teleconferencing and video-cassette delivery systems

DE in North America

In N. American DE:

1) The predominant delivery systems are dissimilar to international educational delivery methods.

2) Asynchronous communication methods (primarily text-based conferencing) are preferred owing to national time zone differences.

3) ETV and video-conferencing media are largely rejected as a cost-ineffective failures.

4) Institutional video production facilities 'downsized'.

5) Online synchronous conferencing is impeded by institutional bandwidth and firewall problems, and by excess of competing, unevaluated softwares.

Conclusions

1) In *A New World of Knowledge* (1999): willingness to collaborate in global course delivery will be frustrated by lack of a common technological infrastructure (prediction so far upheld).

2) International academic community needs educating about international delivery system differences.

3) Need for evaluation of online collaborative options.

4) Need for international educational technology and distance education curricula.

5) Need for regular international online discussions by institutional technology specialists.

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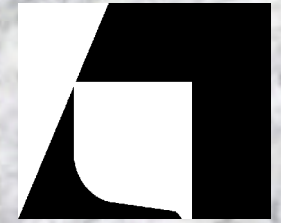
1) Bond, S. & Lemasson, J-P. (1999) *A New World of Knowledge / Un Nouveau Monde du Savoir. Ottawa: IDRC/ CRDI.*

2) Re: Evaluation of online collaborative methods, *see:* http://cde.athabascau.ca/softeval/

3) Re: Online seminar series (January/2003 onwards) about international DE delivery methods, and international DE curricula: baggaley@athabascau.ca

4) Athabasca University: http://www.athabascau.ca

5) AU's MDE Program: http://cde.athabascau.ca

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