Galvanizing Distance Education Initiatives

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The idea of distance education is not new; neither is the natural companionship of technology with the distance experience. Still distance education remains peripheral to Dalhousie's global university budget planning.

Response to student demand for distance education from the university community has been sporadic, under-resourced, and quite often undervalued. Forward-thinking academics realize that the infusion of a student-body into the information age necessitates that universities reconsider the role of distance education with an eye to its prominence in curricular and work-load planning.

Distance Education at the School of Nursing

The School of Nursing at Dalhousie University has a historical commitment to distance education. Our segment of the student market demands the flexibility and accessibility innate to distance delivery. Our distance initiative currently offers unique graduate and undergraduate learning opportunities to registered nurses in Nova Scotia, New Brunswick, and PEI.

Most often these students are older, married, full- or part-time employees and part-time students. For this group, geographic location is not the primary obstacle to accessible university education. Home and work-role conflicts pose real challenges in relation to presence in a traditional classroom. Distance education can provide these non-traditional students with opportunities to access university education while managing home and work-role commitments.

Broadly speaking, distance education generally refers to a learning experience in which the instructor and the student are separated by physical distance. The instructional gap is generally bridged with technology (i.e., audio, video, print, internet) and in some cases face-to-face communication.

Delivery type is often dictated by available resources, instructional content, and the comfort level of the faculty. Effective distance education requires the coordinated efforts of a diverse group of individuals and departments including students, faculty, administrators, library, and campus computing and technology support staff.

Interactivity is an underlying assumption in the approach to distance education at the School of Nursing. Purposeful interaction empowers students to actively initiate and participate in student-to-student and teacher-to-student dialogue. This interactivity not only facilitates meaningful learning but also assists in establishing a support network for students.

Recent research challenges the entrenched notion of traditional education supremacy. Face-to-face interaction in the classroom setting is not the only viable means of learning interactively. A 1996 study done at California State
University demonstrated that students participating in distance learning scored an average of 20% higher than those participating in the traditional learning equivalent (Schutte, 1997). Researchers concluded that distance technology forced students to a greater level of collaboration than within the traditional classroom and this collaborative learning enhanced their performance outcomes.

The Role of Web Technology
Web-based education has 'stolen the show' on the stage of distance education. Teleconferencing and audio/graphic/video conferencing are popular and effective in terms of real-time collaboration but these technologies still require students to accommodate pre-set schedules over which they have no influence.

The aspect of distance education which espouses true self-directed and egalitarian learning necessitates an instructional environment that allows student access to course content and class communication that is not bound by time restrictions and physical location. The Internet has emerged as the incarnation of this learning environment. Web-based technology takes distance education in an unprecedented direction. Both synchronous and asynchronous communication exist in tandem.

The tene of anarchy on which the Internet is grounded becomes the foundation of truly egalitarian learning. Both teaching and learning within the web environment have the potential to be non-linear. Teaching is characterized by the process of facilitation and guidance. Learning becomes the process of self-direction and collaboration. It is Socratic in its nature.

Why WebCT?
At Dalhousie, web based education has been encapsulated in the adoption of a distributed learning environment called WebCT which was developed, and is maintained, by some marvelously maverick minds at the University of British Columbia. The premise of this environment is that it can "...enable faculty to create interactive environments for both traditional and nontraditional students alike." (http://webct.dal.ca:8900/)

Brief Description of WebCT Attributes
In terms of asynchronous interaction, course content can be conveyed in an audio, video, or textual format "on-line" and accessed by students at a self-set pace. Students explore the materials that the instructor has housed on the course site, browse the appending and reference materials, and visit external sites of related interest to which the instructor directs them.

Both asynchronously and synchronously, WebCT offers a variety of interactive communication methods. The bulletin board (also called Forum) allows all class members to post comments and queries in a public arena (public being defined narrowly to mean the scope of the class as a whole). They can respond in "delayed time," allowing all members of the class to read responses and engage in an on-going "thread" of dialogue that is not hampered by the restrictions of limited class time nor the reticence of some students to speak up. The instructor can answer some questions more efficiently in this open arena than by answering each individually.

Internal course email provides an arena for more private communication. Students can join in the chat room to actively debate issues or to collaborate on projects in "real time." Both course assignments and feedback can be transmitted quickly via the web.

To date students using WebCT at the School of Nursing comment in post-course evaluations the desire to interact, most wishing that there was a greater use of the real-time communication tools. Some commented that they appreciate courses that do not rely solely on WebCT for delivery but rather offer a variety of delivery options. The flexibility of access to course materials and the immediate ability to post
questions either to the bulletin board or through email was overwhelmingly popular.

Some found that they would have had richer experiences had there been more orientation to WebCT at the outset and if there had been better on-going access to technical support. Most reflected what could be characterized as a "grass-roots" conviction that university education needs to exhibit a concerted commitment to promoting and supporting internet technologies as part and parcel of the composite learning experience.

For instructors, WebCT involves those ever-terrifying phrases "learning curve" and "labour intensive." Despite the superb technical support provided by Academic Computing Services (ACS) and Artisan Web Press, first time WebCT course developers still report feeling intimidated by the new medium. They also feel pressured by the need to juggle the general issues of their course development with the addition responsibilities of composing course delivery in this unfamiliar environment. Once they have waded in and overcome their initial fears, however, they become more confident.

On the positive side, most report that they are well pleased with the quality of their interaction with their students and with the quality and scope of student-to-student interaction. They report that it is efficient in terms of disseminating materials and discussion information in a timely fashion and that students who would normally be less participatory in a traditional classroom seem more inclined to "speak-up."

Most emphatically, faculty expressed the need for ready access to support and consultation on distance methodology; not just with regards to WebCT and web-based delivery modes but in terms of scheduling, instructional design issues and course management issues.

Several courses, both distance and local, at the school of Nursing now incorporate elements of WebCT. Keeping within the mandate of the School's academic vision, the use of learning technologies offers students greater flexibility in participation and serves to build transferable skills beyond the scope of the course. It must be stated that our distance initiative does not hail the introduction of new or altered curriculum. The courses remain the same; only the mode of delivery has changed.

Advantages and Challenges

* Courses using WebCT can reduce printing costs of course outlines and other course materials (provided that these materials do not infringe on University and Canadian copyright standards and regulations).
* Students are able to interact with each other beyond the scheduled time slot for the courses and their access to one another and their instructor(s) is enhanced, direct, and immediate. Students choosing to communicate via WebCT can avoid incurring long distance charges.
* Course assignments can be transmitted to the instructor and feedback returned to the student via WebCT, which avoids cost and time associated with mail.
* Of course, the experience is not perfect. This is a new technology and there are many challenges to meet. The use of WebCT necessitates student access to Internet-equipped computers. Although the last couple of years has seen an explosion in the number of Nova Scotia households connected to the Internet, it is still not universal.
* Students using Internet providers which charge for hourly usage beyond a certain monthly minimum need to monitor and curb their internet usage to keep costs down. Many will still be connecting to the internet with old modems which will somewhat frustrate the efficiency of their access.
* Those not using the University Premium Dial up service will not be able to access the certain library databases for research purposes (although at the time of this printing, the School of Nursing and the Kellogg and Killam Libraries are actively pursuing avenues to remedy this access issue).
* Those students who do not have home internet
access must make arrangements to use public internet access (i.e., through a local public library) which involves scheduling and traveling considerations that could cause inconvenience.

Conclusion
Regardless of whether distance methodologies are used to facilitate local or distance learning, or a blend of both, there is a gradual blurring of distinction between the two.

Faculty are striving to prevent the segregation of these two groups of learners. As instructor comfort with the technology grows, so too does the ability to communicate as effectively with students geographically removed from the traditional learning setting as they do with those students still sharing the same time and space.

There are still barriers to true assimilation:
* Distant students still face library access issues
* Time commitments associated with teleconferencing
* Some content is simply not suitable for asynchronous delivery
* Student learning styles may not blend with a particular learning environment

The School of Nursing has been working to address these challenges. The School is actively forging partnerships with the libraries and ACS to work cooperatively on access and technology issues.

In March of 1998, the School created the position of Instructional Technology Co-ordinator to facilitate the use of distance modalities and to provide support for both faculty and students in this regard. The School has absorbed this investment within its departmental budget but realizes that long-term growth can not be sustained if our initiative is a solitary effort. The future and evolution of distance education necessitates that the fragmented distance initiatives scattered around the university must come together in a collective voice to impress upon University administration the need to centralize and fund such initiatives.

Leading the Charge
Distance education is not only a fact of life in the information age but it is a matter of academic and economic survival (Eisenberg, 1998). The challenge for Atlantic Canada's premier university is to realign financial commitments with the needs and demands of a distance education which is in its infancy. Disjunctive pockets around campus, while sincere and individually effective, are crippled in terms of growth without the infrastructure of a centralized support. Currently, resources must be mustered from individual department budgets.

The School of Nursing hopes that other departments engaged in distance education will join forces with us to rally centralized support for funding for distance education and the allocation of sufficient resources for growth in the future.

References for this article are available from the Office of Instructional Development and Technology, or on-line at http://www.dal.ca/oidt