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Reflections on Teaching and Learning Online: Quality program design, delivery and support issues from a cross-global perspective

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This reflective paper began with a discussion of the online program design and delivery experiences of three senior faculty members at the University of Calgary (Canada) and Deakin University (Australia), which was recorded at Deakin University. After drawing on this recording in their research and practice, one faculty member from each institution decided to review and expanded upon their intervening experiences in terms of issues of quality program design, delivery, and support issues when teaching, and learning in different cultural contexts. The authors discovered that these issues are as important today as they were when they met to record the interview, and have concluded their discussion here with thoughts about the teaching, student, and administrative supports that institutions engaged in online program delivery cross-culturally must address in order to successfully deliver quality online programs worldwide.

Introduction

> … two adult learning principles that really come alive in computer-mediated classes are self-directedness on the students' part and … true facilitation [on the teachers' part] … computer-mediated classrooms literally demand this. (Hutton, Wiesenberg, & Stacey, 2003)

This was the overall theme of a recorded discussion between three experienced online teachers involved in a collaborative academic relationship between the University of Calgary's Master of Continuing Education (MCE) and Deakin University's Master of Professional Education and Training (MPET) programs. This academic discussion, which raised a number of common issues between these

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two countries, was recorded in Geelong, Australia at the end of 2001 following a research seminar presented on this topic (Hutton, Wiesenberg, & Stacey, 2002). Recent analysis of the transcription of this recorded interview revealed that the key issues discussed then (program design, program delivery, cross-cultural issues) are still very relevant 3 years later.

In this paper, the authors (two of the original three discussants) further explore these issues, relating them to the current research literature, as well as to their current practice. In the process, it is apparent that these issues are, today, even more critical as more adult learning programs move "online", and institutions fail to appreciate the complex nature of the systemic support required to deliver quality online learning both nationally and cross-globally. In fact, it appears that while the number and variety of courses and degrees becoming available through distance education has increased dramatically in this short time-period (Howell, Williams, & Lindsay, 2003), a common theme in the current research literature on this topic is the apparent lack of a concomitant improvement in quality, effectiveness, and benefits of online learning from both the learners' (Murphy & Coleman, 2004) and the academy's perspective (Caplan, 2004; Parker, 2004).

Background

In 2000, a Memorandum of Agreement (MOA) was signed between the University of Calgary and Deakin University, with three overall objectives: to develop and nurture an ongoing collaborative academic relationship between the University of Calgary's MCE and Deakin University's MPET programs; to share academic resources to the benefit of both faculty members and students in these two programs; and to engage faculty members in mutual exchanges in order to expand research and development opportunities in both institutions. The authors acted as the coordinators of this MOA for their respective institutions, with their first task to implement the second objective through the sharing of academic resources.

This sharing of academic resources took the form of allowing students registered in both the MCE and MPET programs to register in selected online courses developed and delivered by each institution. In effect, this created four "cross-global" classrooms in which 40 students located in Canada, Australia, and parts of South East Asia interacted online cross-globally to learn together. Table 1 presents the numerical distribution of the student population in the pilot exchange project. The Deakin University group studying Canadian courses was drawn from a volunteer group, and all were female (one took both Canadian courses), achieving in the MPET program at varying levels. Three of the Canadian students (all female) were from the same cohort in the MCE program, were all from eastern Canada, and had met face-to-face during their intense 3-week summer school—and the one male, living in western Canada, was a doctoral student selecting coursework units as electives from the Masters program. Demographic information gathered portrayed a diverse set of students: 30% were between the ages of 31 and 40 years, 30% between 41 and 50 years, and 40% between 51 and 60 years. The number of online courses

Table 1. Summary of student population

Course	Total	Canadian	Australian
Career development	4	2	2
Multicultural issues	12	8	4
Media, text, and technologies	11	1	10
Teaching and learning with CMC	17	4	13
Total	44	15	29

respondents had previously taken ranged from 1 to 10, with the average being 4.5 courses; the number of years of computer experience among students ranged from 3.5 to 20 years, with the average being 10.6 years.

Courses involved in the exchange project were as follows:

- University of Calgary, Canada
  - Career Development in Organizational Settings
  - Multicultural Issues in Adult Education
- Deakin University, Australia
  - Media, Text and technologies in Open and Distance Education
  - Teaching and Learning with Computer Mediated Communication

While enriching students' and teachers' learning/teaching experiences in many ways, this pilot course-sharing also revealed a number of key institutional issues related to how to best support this kind of distributed teaching approach in order to maximize the benefits for students and faculty members alike. This article draws more on the second objective of the MOU, to engage faculty members in mutual exchanges in order to expand research and development opportunities in both institutions, and reflects the comparative possibilities of this academic relationship. The analytical method used with the recorded discussion that served as a basis for this paper was not intended to emulate a research methodology, but was used as a framework to explore important issues that were noted as common in online teaching in both Australia and Canada. These issues were analyzed from the authors' cross-global perspectives, and were then further informed by extensively searching the literature about online learning and teaching that also explores the issues raised. The paper first discusses each of the three key program design and delivery issues that surfaced during the original discussion in 2001, and then elaborates on how each is tied into the overarching issue of the quality of institutional support required for such an initiative to succeed. Much of this latter discussion is supported by the comprehensive evaluation of this pilot course sharing conducted by the authors (Wiesenberg & Stacey, 2001).

Program Design Issues

The program design process is a complex one, depending on several intersecting factors and strongly influenced by intangible variables that often become apparent

only after the initial design process is completed and program facilitation is underway (Caffarella, 2002; Sork, 2000). With extensive program design and delivery backgrounds (both face-to-face and online) within cross-cultural adult learning contexts, the three faculty members who initiated the MOA project held similar assumptions about program planning, as well as a shared view of the pedagogy of teaching and learning online (Stacey & Wiesenberg, 2002, 2004).

The issues related to program design that surfaced in this taped discussion essentially confirmed their shared approach to online program planning and delivery, as well as added new layers of understanding of this topic as considered from each participant's country's perspective. In this regard, five central themes appeared from the analysis of the transcription: the need to spend considerable time in the pre-delivery phase of program design, the more complex nature of teaching in a more complex online learning environment, the effect of different communication media on communication dynamics, the value of asynchronous communication for in-depth critical reflection and analysis, and the importance of empowering students to take responsibility for their learning. The overriding theme in the program design phase was to design the course using teaching approaches and techniques that effectively engage all students in the learning process to build a successful "learning community" online.

Theme 1: Time spent in the course predelivery planning phase reduces time spent solving course delivery problems once the course is underway

> When Susan and I taught those first online courses we hadn't fully worked out all the bugs in the first class for us and so there were lots of technical problems that took sometimes weeks to solve. (Hutton et al., 2003)

Caffarella's (2002) research-based interactive model of program planning for adult learners consists of 11 preprogram delivery steps, beginning with researching the people, organization, and wider environmental context of the program to be delivered, and focusing on the iterative nature of the whole planning process. Sork (2000) describes the importance of being sensitive to diversity in terms of cultural, social, and political differences in negotiating, sometimes, several different stakeholder agendas in the preprogram planning process. If coteaching, Wiesenberg (2004) points out the need to formulate fail-proof communication and problem-solving strategies before the course begins, to minimize the amount of time required to problem-solve once the course is underway. Other teachers experienced in distance education agree that an extensive predelivery planning phase is essential to maximizing the success of any distance program (Ally, 2004; Caplan, 2004; Koszalka & Ganesan, 2004).

Ally (2004) describes how it is the instructional strategy, not the technology, that determines the quality of the learning within a distance classroom, and that the design of these strategies must follow sound design principles. He and other workers (see Anderson, 2004) conceptualize "online learning" as including numerous variables that must interact in a logically sequenced manner to produce a high-quality

program. Koszalka and Ganeson (2004) recommend that logical sequencing alone is not sufficient and that course philosophy, learning expectations, and features of the course management system all have to be well matched. Due to this complex nature of a program delivered by advanced communication technologies, Caplan (2004) recommends a centralized team approach to distance program design that ideally includes different professionals to fulfill these functions—subject matter expert or author; graphic designer; Web developer; programmer; and instructional designer. More realistically, in most institutional settings online, teachers fulfill all of these functions by themselves.

In the Canadian experience, the teaching team planned a carefully designed period of intensive face-to-face classes to introduce students to conceptual ideas of the program, as well as orienting them socially and technically to their ongoing online courses. In the Australian program, because students were distributed more broadly geographically, print materials were developed for the conceptual introduction, and multimedia materials (both CD-ROM and online help) were provided to introduce students to the online system. This meant that in the first weeks of the new Australian academic year new distance learners sometimes struggled with access and system learning problems and, although supported, this sometimes slowed their initial interaction rate online until such problems were solved. In comparison, the Canadian students, with on-campus online training, were more quickly interactive communicators, and required less assistance online with accessing courses from their various sites across Canada.

Theme 2: Several different teacher roles are needed in online teaching to deal with the differing issues that emerge as specific to the online learning environment

Numerous researchers refer to the importance of taking on new social, managerial, and technical roles when teaching online, expanding considerably the traditional face-to-face teaching skill base (Anderson, 2004; Berge, 1995; Caplan, 2004; Rodriquez & Nash, 2004; Salmon, 2000). Anderson (2004) discusses the need to be learner-centered (sensitive to the diversity of students' learning needs and styles), knowledge-centered (providing the "big picture" scaffolding from which students make knowledge discoveries), assessment-centered (motivate, inform and provide feedback to students), and community-centered (facilitate the building of a learning community). Caplan (2004) describes the technical skills that faculty members who use technology to teach must develop as including everything from basic PC skills to being able to use all of the software applications available to students. Salmon's (2000) model of online facilitation requires teachers to take on a progression of tasks as he or she moves through each of five progressive phases: welcoming and motivating students to access the course, providing students with online social skills to build a learning community, supporting their use of learning materials, facilitating the knowledge construction process, and supporting student independence from the teacher and interdependence upon each other in the learning process.

> … [there is a] technical role that the online facilitator needs to, if not take, at least attend to and this is really the whole idea of making the technology invisible so that the students can get on with the process of learning. Not an easy task sometimes and probably the one that's the most daunting for a novice online instructor. (Hutton et al., 2003)

Developing an effective online course requires a teacher learning how to navigate and manage it, and then teaching students the essential technical skills required for successful online learning. This is a very challenging new task for novice online teachers. This course development role becomes especially difficult when institutions do not recognize the importance of providing technical support (for teachers and students) in a manner that makes the teaching medium invisible, thus allowing learning to proceed unhindered by troublesome technology (Wiesenberg & Stacey, 2001). Both Caplan (2004) and Rodriquez and Nash (2004) recommend that a Web course development team work with the teacher to both develop the course and support its delivery.

Berge's (1995) extensive review of the online teaching literature in the early 1990s identified four roles essential to successful online facilitation: pedagogical (content expert), managerial (designing and implementing course structure and procedure), social (engaging students in appropriate, as well as critically reflective, online dialogue), and technical (making the course delivery media invisible to the learners). More recently, Wilson and Stacey (2004) identified a similar set of online teacher roles that include manager/administrator (concerned with issues of learner registration, security, record keeping, etc.), technical (helping students to navigate the online learning environment), pedagogical, and social (providing a scaffold for the students' development of independence online).

Theme 3: A "blended" approach to program delivery makes building community online easier than a strictly online approach

> When we designed the program we thought long and hard about the combination of face-to-face and online learning and teaching … and decided that for this program we would start the students in a face-to-face learning environment. Therefore, they come together for a three weeks face-to-face institute in a couple of different locations in Canada, and then it's only after this face-to-face piece that they start the online part of the program … in total they have two face-to-face segments that are interspersed, one in the beginning of the first year, one in the beginning of the second year, but in between they do all their work in computer-conferenced courses. So the needs of the student; the learning goals of the program dictated that particular structure. (Hutton et al., 2003)

Pappas and Jerman (2004) state what many in the field of distributed learning believe, which is that a blended model of online instruction is the way of the future. Even for students within commuting distance to their traditional campuses, they see short face-to-face courses on weekends and/or evenings at convenient workplace or community sites supplementing primarily online instruction. Anderson (2004) believes that we are "entering an era where streaming video, video and audio conferencing, and virtual worlds are readily available for educational use" (p. 7).

> We believe that for experiential learning and critical reflection … one of the real keys of creating a safe trusting community is … for students to meet each other and work together face-to-face … to build some trust on common ground [from which] to begin the online dialogue. (Hutton et al., 2003)

As described in this comment, the University of Calgary program was a blended approach that used the initial and mid-point face-to-face sessions to establish and consolidate a sense of community. Due to wide geographical distribution of the Deakin student group, who were often located internationally, the Deakin program was mainly taught online, with communication by email and telephone also available. If face-to-face sessions are not possible in globally delivered programs, Stacey (2002) believes that the planning must involve a careful introductory online learning phase of establishing social and teacher presence.

> We know that in a textural medium like this that people respond in quite strange ways sometimes misinterpreting words … when I suggested that they then use another medium … and talk it through [by phone] they discovered they actually had a lot of similarities. (et al., 2003)

The online teacher plays an important role in developing an atmosphere of socially responsive discourse by modeling social encouragement with content discussion. This begins with the teacher's first messages and interactions that model and explain communication strategies and tools that enhance social presence and develop group cohesion, as well as continuing by threading students' messages (best done with humor and self-disclosure) into easily accessible discussion topics. By playing an active monitoring role in large and small group discussions, organizing topic threads, and suggesting that students use multiple communication media (such as telephones, online synchronous chats, and group discussions), the teacher is instrumental in moving the discourse forward in a productive and responsible manner.

Garrison (1997) calls this online conference moderation *contextualizing*, where the teacher provides the communication model as well as organizing and focusing the online discussion. While Garrison recommends initial face-to-face meetings of program participants and teachers to facilitate the community-building process, when not possible (as in Deakin University's program) the teacher's ability to monitor small group interactions using multiple communication technologies becomes very important. Garrison, Anderson, and Archer, (2000) defined a "community of inquiry" model that holds the teaching presence as an important factor in structuring and facilitating active learning. Stacey's (2002) research demonstrated the importance of this role in establishing a social interaction pattern that enables the social presence of the online participants to build an environment of trust and supportive response. Planning and designing these strategies into the course ensures that a sense of online community is established (Stacey, Smith, & Barty, 2004).

Theme 4: Asynchronous communication encourages critical reflection and analysis

> One of the things that we do address in our first face-to-face piece in the institute is critical reflection and critical analysis … in a familiar and more comfortable context …

> helping at the beginning [to build those skills] … then continuing that process online. (Hutton et al., 2003)

While introducing students to the concept and practice of critical thinking may be best done in a familiar face-to-face classroom, the very nature of asynchronous communication acts to encourage more in-depth critical reflection and analysis by allowing more time for students to gather their thoughts offline and write and edit these thoughts before posting them for discussion (Anderson, 2004; Biggs, 1999; Burge, 1994; Feenberg, 1999; Heckman & Annabi, 2003; Wiesenberg & Hutton, 1996). In this way, students who tend not to participate in face-to-face complex discussions are often much more involved in such online discussions.

> … being the intellectual guide for your students online … doesn't really look very different online than it does face-to-face … other than needing to be perhaps more explicit and direct online helping students to weave concepts together and teaching them how to do the linkages. The threaded aspect of the (online) discussion … (more easily facilitates this). (Hutton et al., 2003)

Anderson (2004) stipulates that the skillful e-teacher can provide the intellectual scaffold for students to then take advantage of the Internet's expanded opportunities to explore knowledge resources more deeply than before. Biggs (1999) believes that the Internet, when used by a skillful teacher, can promote critical thinking by engaging students more meaningfully in online dialog, which Burge (1994) supports in her analysis of online graduate classes from a student perspective. Heckman and Annabi (2003) think that students achieve higher levels of abstract thinking online than in traditional face-to-face classrooms, because the asynchronous medium allows them to develop more careful, formal, and reflective responses. This ability of asynchronous communication to encourage more reflective responses may be the result of the fact that "most people formulate ideas more easily in written form than in speech in front of an audience" (Feenberg, 1999, p. 7). This is one of the conclusions that Wiesenberg and Hutton (1996) came to when comparing their teaching experiences in computer-mediated and face-to-face courses in the MCE program.

At the same time, however, the lack of visual cues in an online learning environment can make giving critical commentary effectively more challenging, as comments alone, devoid of friendly gestures or facial expressions, can encourage the feedback recipient to interpret words more negatively than intended. Therefore, skillful critique and inquiry skills have to be explicitly taught by teachers to students to enable them to be analytical and critical without unintentionally offending their online classmates.

> [To help students strengthen their arguments we designed] … a three weeks module wherein everyone does the primary posting in the middle week so that there's more offline reflection. I found from the beginning there was not a good balance between online time and offline reflection. If we want critical reflection we must build in some points within the course where they are not having to be online … I've just been surprised by the depth of the analysis. (Hutton et al., 2003)

Theme 5: It is critically important to use instructional approaches and techniques that engage and empower students to take responsibility for the learning process

> The role of the teacher is dramatically different and the role of the student is dramatically different as you move from the traditional face-to-face to what we do online. … in order to work well, the teacher moves away from being an expert and moves very much into the role of being a guide and a coach and sort of a co-learner and the student has to be … a much more active part of the learning and teaching process. … this approach is "developmental", … grounded in constructivist theory in terms of the learner, the students understanding evolves as they relate the new stuff that we're teaching in the classroom to their own previous knowledge.

Instructional approaches based on adult learning principles have long been recognized as critical to the success of face-to-face programs designed for adult learners (Caffarella, 2002; Kiely, Sandmann, & Truluck, 2004; Merriam & Caffarella, 1999). Chickering and Ehrmann (1996) describe how advanced communication technologies have enhanced the implementation of their original seven principles for good practice by increasing opportunities for interaction between and among students and academic staff. They describe how study groups, collaborative learning, and problem-solving groups can all be dramatically strengthened through communication tools that facilitate such small group activities.

Of Pratt's (1998) five perspectives on teaching adult learners, a combination of developmental and "intellectual" apprenticeship approaches appear most compatible with creating online learning environments that places the student into an active learner role (D. D. Pratt, personal communication, January 17, 2003). Based on a constructivist theoretical framework, the developmental approach views the teacher as a resource and guide, creating bridges between the students' previous knowledge actively moving them towards more complex understanding. At the same time, it uses experiential instructional techniques to engage students in the learning process by linking theoretical constructs to students' own lives, bringing alive the theory, and allowing students to integrate it into their own world views (Kolb, 1984). The "intellectual" apprenticeship approach resembles situated learning in its focus on the reciprocity between individuals and the social group, as the individual learner learns the skills of online communication and facilitation from the teacher by engaging in the process to become a skillful practitioner.

> In a group of 24 we typically break the class into smaller groups to work online with each other as moderator teams, to take over one of the [weekly] discussions topics, and/or to work on small group projects online and then report back and engage the rest of the learners. So it actually doesn't matter what total size of the class you have, you can do smaller group collaborative kinds of things [to engage everyone]. (Hutton et al., 2003)

Burge's (1994) study of online learners identified challenges related to handling large quantities of information and discussion fragmentation, lack of visual or aural cues, and generally feeling out of synch with the discussion in Web-based classrooms.

Face-to-face instructors know that small "sub-groups" of students more effectively engage in the learning process in traditional classrooms (Brookfield, 1990;

Johnson & Johnson, 1997). Many experienced online teachers have discovered that using small groups skillfully works equally effectively (if not more so) in the online classroom (Hiltz, 1994; Palloff & Pratt, 2001; Stacey, 1999). Working on online projects in groups of three to five allows students to more effectively relate to each other in sometimes intimidating large faceless online classes devoid of visual or audio cues to help them decipher their classmates' text messages. Engagement in the learning process is self-motivating, and the first step towards taking more direct responsibility for one's learning (Brookfield, 1990).

Program Delivery Issues

As well as sharing assumptions about program design, the authors typically approach teaching generally, and teaching with distributed communication technologies in particular, as "new learners" in terms of being open to students' feedback, engaging in critical dialog with students and colleagues (Brookfield, 1999; Jarvis, 1999; Wiesenberg, 1999; Zinn, 1998), and continually reflecting on and revising the underlying assumptions of their individual "theories of practice".

Four themes specific to program delivery that arose were as follows: A "developmental/apprenticeship and experiential" approach to course delivery works well in an online teaching context; deliberately creating a safe "community of learning" online, as well as building students' online communication skills, is essential; being very well-organized online, as well as modeling what this looks like to students, is critical; and the huge diversity of students cross-culturally requires a breadth of carefully selected teaching interventions.

Theme 1: A "developmental/apprenticeship and experiential" approach to online course delivery is a very effective way to engage students in the learning process

> Always, there is a requirement for students to be active online and it will vary a little bit from course to course … many of us instructors do not just ask them to respond to questions and interact in conversations, but also to moderate part of the discussion so they take an act of sort of apprenticeship teaching role in the programs as well. (Hutton et al, 2003)

The value of an experiential approach (Kolb, 1984) situated within a developmental/apprenticeship teaching approach (Pratt, 1998) was discussed in terms of program design (see Theme 5 in the previous section). A combination of teaching strategies from all three teaching approaches seem especially well suited to an online learning environment. Additionally, encouraging students to take an "apprenticeship role" in the teaching/learning process helps them to move towards Salmon's (2000) Stage 5 of independence from the teacher and interdependence upon each other as online learners and critically reflective thinkers (Brookfield, 1986).

> … student [discussion] moderators are responsible for introducing the topic to the rest of the students and moderating the discussion for the length of that topic … [and doing] some clarification and summarizing and perhaps threading together ideas and then

> ending up summarizing of the topic at the end … my students tell me that initially they are nervous about it and they sometimes don't want to do it, but at the end of that experience they all say that was when they were the most engaged in the course and they are very appreciative of having had an opportunity to do that. (Hutton et al., 2003)

Brookfield (1999) describes how engaging learners in discussion helps them to develop critical thinking skills in a number of ways, most notably by connecting them to the topic, and helping them to become co-creators of knowledge by learning collaboratively. This style of learning also fits with Salmon's (2000) Stage 5 interdependent learning style.

Theme 2: Deliberately creating cafe "community of learning" online, as well as building students' online communication skills, is essential to the online course's success

> To learn a new skill you first have to become aware of it, break it down [for example] … pausing that minute or so before you send your message … to reread it, to make sure it says … what you intend to say. (Hutton et al., 2003)

When online learning programs first became available, many students entering these programs had never used a computer for interactive dialog (Wiesenberg & Hutton, 1996). They came into the program quite anxious about their ability to learn online, and often needed a fair amount of reassurance from instructors in their first few weeks when faced with technical difficulties and feelings of social isolation (being "out there in cyberspace all alone"). Creating an online classroom environment that felt safe, interconnected, and navigable, as well as becoming skillful online communicators, was critical to their retention and eventual success.

> Meaning-making happens through … good interpersonal communication skills … and since learning in a CMC environment is highly interactive dialogue, interpersonal skills are very critical. Modeling it along the way [and using] direct instruction … within the context of the course is powerful to students. (Hutton et al., 2003)

Theme 3: It is critical to be very well-organized online, as well as help students to become so through modeling what this behavior looks like online

> Text takes time to enter and … to read. So … start to look at your life schedule. Where are you going to block the time? Because from either a facilitator point of view or a learner point of view one of the initial things I think we're not up front about is the extraordinary demands on our time as compared to a face-to-face. Most learners and instructors report similarly that they like CMC because it's asynchronous primarily … the huge advantage of flexibility also comes with the cost of usually twice to three times more time investment. … to prepare people one of my strong pieces of advice [is to] not underplay the enormous investment in time and organisational skill that people will need. (Hutton et al., 2003)

A number of experienced online teachers describe how online communication takes up to three times as much time than does face-to-face communication (Stacey & Rice, 2002; Wiesenberg & Hutton, 1996), and therefore how important it is to both develop good time management skills as well as teach students these same skills.

Otherwise, teaching and learning online can become so time-consuming that both parties feel overwhelmed.

> What I've tried to do is always put the comment in the group forum so that it means that I don't always have to multiply that response [to students individually] … [which] adds to our workload. (Hutton et al, 2003)

Describing and modeling time-efficient online communication strategies, such as using group forums to communicate information to all students at once, reserving more time-consuming private email communication for confidential messages, shows students how to be skillful time-managers. This is an area of distance education that needs much further research as institutions shift to virtual communication in many additional administrative functions, such as providing online registration and online student support services.

Theme 4: The increased cultural diversity of students in programs offered cross-culturally, requires a breadth of teaching interventions

("Culture" is defined as ethnic, geographic, and gender, and a number of related issues surfaced in this discussion regarding respecting cultural differences by using different teaching approaches and communication media.)

> Younger students right out of the Asian postsecondary system or secondary system [find that going from didactic to collaborative learning is a] hard transition for them to make … based on my research … and discussions with Japanese colleagues for whom the concept of collaborating online is totally foreign. (Hutton et al., 2003)

Wiesenberg's (2004a, 2004b) cross-cultural research with Canadian and Japanese university students indicates that these two cultural groups use computers in very different ways. Canadians engage in interactive messaging more often and more skillfully than their Japanese counterparts, who tend to use computers for one-way communication more often. Also, certain subgroups within these cultures behaved differently—with younger male Canadian and Japanese students demonstrating far more tendency to use the Internet to learn in an independent manner, while younger female students of both cultures appeared more comfortable and willing to use the Internet to learn in a more "discussion-based" or collaborative manner. In cultures that are not used to collaborative learning approaches, the challenge of becoming an effective online learner within a discussion-based environment can be enormous, requiring a carefully blended teaching approach that combines more traditional didactic with collaborative strategies.

> Our western students tend to … multi-task [or] … do everything at once. If they're traveling they take their laptop, if they … work … late [they find time to study there]. They're online regularly because we require fairly regular postings at least once a week. [But] the work style and pattern of the Asian students was much more linear and compartmentalised. Requiring them to be online every week did not work. [When] out of the country on a project they focus on that. So a modular format … [without] the highly interactive CMC on line … fits [them better]. (Hutton et al., 2003)

> [With Asian students] … there still is that view of the teacher more as the expert, more didactic, more lecturing with not as much freedom … [to discuss/debate]. … they were comfortable [discussing/debating] face-to-face and it would be my belief, with more time to build enough of a community [face-to-face], that we could model and encourage the online dialogue. But it seemed that the more entrenched culture of teacher-as-expert [prevails] when we weren't there physically.

Pratt's (1998) research on cultural differences in teaching approaches with adult learners confirms that Asian students prefer more "teacher-centered" teaching styles than do western students, who are more familiar and therefore more skillful with "student-centered" teaching styles.

> Successful CMC interactions lean far more towards the feminine way of communication, and in fact, males may be disadvantaged unless we … skill-build by using students' names, quoting part of what they said (to acknowledge them), and bring it back to the topic … some people and cultures are going to need to learn that to build that social presence (online). (Hutton et al., & Stacey, 2003)

Hutton (Wiesenberg & Hutton, 1996) describes communication differences between women and men in the typical face-to-face classroom that result in the male students' voices being more evident and credible. Due to the different nature of online communication, this seems to be reversed in online classrooms, where a "female" communication style that is naturally more collaborative and uses more listening and affirmation skills seems to better facilitate community building and subsequent free-flowing critical reflection/analysis.

In summary, across the program design and program delivery phases, it appears that the need for more time (for both course design and delivery), the increased complexity of the learning environment (due to the nature of the medium and of the learner populations), and the importance of using a developmental/apprenticeship approach (to teach course content, as well as online learning skills) are common challenges facing teachers seeking to become skillful online instructors, and institutions seeking to offer high-quality online programs cross-globally.

Critical Support Issues that Emerged

The authors' reflections on teaching cross-globally revealed three inter-related support issues facing institutions seeking to deliver quality online learning: The necessity of providing quality professional development and ongoing teaching support to the teaching staff involved in cross-global program delivery; the necessity of providing quality learning support to the students learning in cross-global virtual classrooms; and the necessity of providing quality administrative support to both faculty members and students before, during, and after their online teaching/learning experience.

Quality Teaching Support

The first of these issues is the need to provide high-quality professional development and ongoing teaching support to faculty who teach online/at a distance so that they

fully understand the new roles and responsibilities that online teaching requires. The MOU evaluation report revealed a higher than average level of "online teacher absence" in one course, which resulted in lower course quality ratings (Wiesenberg & Stacey, 2001). The teacher in this course experienced quite a number of technical difficulties, exacerbated because she engaged in this pilot on her own initiative, not as a member of her postsecondary institution, and therefore lacked any institutional support from her site in the northeastern United States. She was also perceived by students as lacking awareness of this group of culturally diverse online learners' "social and cultural" needs. This discovery raised the coordinators' awareness of the need for all instructors to have a strong institutional technical support, excellent online teaching/learning skills, as well as an inclusive philosophy of teaching and learning online. Moving from face-to-face classrooms to online ones requires a period of developing an online "theory of practice" that is best done through self-reflection, engaging in dialogue with more experienced colleagues, soliciting feedback from your students as your courses proceed, and having administrative support to experiment with new methods and strategies.

> It's very important to be aware of what your key assumptions are about the teaching/learning process so that you can be consistent in terms of what your [theory of …] practice is … Then I would say it would be important to look to what others who have more experience have found effective. It is about adopting strategies and techniques that have been already demonstrated to be effective before then moving on to sort of reflecting on your own experiences as you move through the teaching process, and then formulating your own theory of practice around what is effective for you in your classrooms, given your students and your learning goals. Always listen to what your students are telling you and then … always ask them how things are going. So, be in their sort of critical dialogue with your students all the time. (Hutton et al., 2003)

The research literature on online teaching/learning provides ample evidence for the need for specific professional development for teachers shifting from the traditional face-to-face classroom to the virtual classroom (Hiltz, 1994). Given that all three teachers in this pilot evaluation were experienced online teachers, it was assumed that this professional development was not necessary—but the pilot evaluation indicated that, regardless of previous online teaching experience, ongoing professional support, continuous professional consultation, student feedback, and regular formative evaluation is still critical (Wiesenberg, 1999).

> If you haven't [taught online] before, we tend to have some kind of an apprenticeship… or a co-teaching role that we always recommend … [first] the instructor consults with the students and gives the rationale that this person is considering teaching the next course or will be involved, and [obtain] permission for them to be a guest for two weeks. In that case because it's virtual, you want to ask the [guest] specifically to introduce themselves online and enter the discussion once in a while. (Hutton et al, 2003)

Caffarella and Zinn (1999) describe four factors that can either provide barriers to or supports for initial engagement in, and ongoing professional development for, teaching staff: people and interpersonal relationships (i.e., personal support systems at the workplace), institutional structures (i.e., necessary resources for professional

development), personal considerations and commitments (i.e., support of family and friends), and intellectual and personal characteristics (i.e., to provide excellence in the workplace). Each factor has the potential to enhance or hinder a teacher's ability to engage fully in the teaching/learning process, deal with challenges that arise, and succeed in any learning environment.

Quality Learning Support

The second issue is the quality of learning support readily available to the online/distance student. This issue was reflected in numerous comments made by students in the pilot evaluation regarding their frustration with the technology's occasional breakdown, specific elements of courses that were different from those they were used to in their "home" program, social learning challenges that they had not encountered before (such as dealing with very "verbally demanding" classmates from the other country), and administrators who did not always appear to be listening/responding to their concerns and needs (Wiesenberg & Stacey, 2001). The research literature on student support requirements in face-to-face classroom leaves no doubt that providing quality learning support is a critical issue within the traditional university (Keierleber & Hansen, 1992; Schlossberg, Lynch, & Chickering, 1991). Institutional neglect of this need for online/distance students can result in student dissatisfaction and program withdrawal (Wiesenberg, 2000).

As postsecondary institutions move online with programs, the lack of necessary online student services is particularly apparent in those institutions with little or no previous history of providing distributed learning to students. While "designing responsive online learning environments" (Hicks, Reid, & George, 1999) is recognized by bodies that create guidelines for the provision of quality distributed education as essential (see Quality Assurance Agency for Higher Education publications, 2002), as yet there are few examples of institutions doing this well. One very good example (Brigham, 2001) used a systematic approach that examined "extra-institutional societal factors acting on the institution from without and factors acting from within" to design a student learning environment that addresses each of the factors identified as "barriers to learning" (no residential campus infrastructure, no residential faculty, and students who work and study at home in locations geographically dispersed across the country). The resulting integrated system includes electronic advising, electronic peer network, online databases, online bookstore, virtual library, and alumni services all available via the Internet.

Quality Administrative Support

The third issue is the quality of administrative support available to both teaching staff and distance students within an online classroom. The MOA course-sharing pilot evaluation revealed a critical weakness in how both partner institution's administrative systems were unable to "communicate efficiently and effectively" with each other at both the staff and program levels. The result was considerable wasted time

and effort for teaching and support staff, not to mention considerable frustration for both, as new procedures were created to address these problems. This happened because of the lack of institutional commitment in the form of staff resources dedicated to the pilot, resulting in the cancellation of a second course-sharing. Both coordinators decided that neither had the personal energy or resources to extend this project beyond its initial pilot.

> … the resource issue … [or] lack of time and … technical support that is an institutional barrier that really needs to be addressed and isn't, as far as I can see, [addressed] very well in Canada. And once you take care of this, I think those two reasons probably cover most of the reluctance … then I think you will have more teachers deciding that yes, this is a really interesting and rewarding way to go. (Hutton et al, 2003)

> [An online course] easily takes me three times more [to teach] than a face to face. To do these kinds of additional social role tasks … We may need to look as redesigning our work loads. (Hutton et al., 2003)

Since the pilot evaluation, Deakin University has mainstreamed the use of online learning throughout its courses, with policy support that defines ideal levels of online interaction and pedagogical support. Also, a code for good online practice has been developed. Deakin Studies Online includes a Learning Management System, and the university provides students and staff with the software and support material required for participation through the yearly updated Deakin Learning Toolkit, a CD-ROM distributed to all students in any location. Training for staff and students in pedagogical strategies as well as in technical skills is being provided in a variety of ways including workshops, online support, through print, and through fellowships that assist faculty staff to gain the necessary skills and mentor their colleagues. All support services are provided online from library borrowing to bookstore access, student administration, and communication.

Since this pilot, the University of Calgary has developed new policies and procedures for distance program delivery, creating a teacher professional development centre to enhance program design and delivery skills, as well as adding distance student support in its library and registration functions. Interestingly, the MCE program has moved from a blended delivery to a fully online delivery format, and the gains in student accessibility and flexibility still need to be evaluated against the possible loss in community building that may have resulted.

Overall, it was significant that this first course-sharing pilot evaluation was rated by all key stakeholders (i.e., students, teachers, program directors, and related institutional support staff) as highly successful/satisfying from a learning and teaching perspective, as well as personally and professionally worthwhile. While day-to-day administrative hassles for teachers (reporting of grades, provision of transcripts) detracted from the quality of the teaching/learning experience (Stacey & Wiesenberg, 2002), the results of this pilot exchange did contribute to Deakin University's new policy of international exchange development and consideration of support issue solutions. At Deakin University, all students now study one subject in their program fully online so that they develop the online skills for international lifelong learning.

The literature is clear that institutional commitment and ability to provide the necessary administrative resources to support online/distance programs is absolutely critical to the programs' quality and subsequent success (Brown, 2002; Caffarella & Zinn, 1999; Carliner, 2002; Gallant, 2000; Pajo & Wallace, 2001; Stacey & Wiesenberg, 2002, 2004). While Caffarella and Zinn's (1999) conceptual framework of barriers and support for professional development for faculty positions institutional commitment as key, Carliner (2002) identifies 13 administrative issues critical to offering distance courses with institutional partners, ranging from the need to identify the administrative model (remote, cross-enrollment, joint) to be followed, address differences in academic cultures, calendars, registration processes, library resources, and grading procedures at each institution, to making sure that textbooks and course materials arrive on time, and that relationships at all levels of the project are developed and nurtured.

Conclusion

Currently there exists a vigorous debate among faculty members and other stakeholders about the real motives behind moving program delivery online, with positions ranging from increasing the availability to high-quality education to increasing the profitability of the educational enterprise (Davies & Stacey, 2003; Feenberg, 1999; Zemsky & Massy, 2004). Those institutions recognized as "doing it right", however, have clearly committed to the former, expending up to three times the resources on distributed courses compared with face-to-face courses (Harasim, 1999). The second key debate on this issue deals with the application of advanced communication technology to the delivery of education in the first place—does the technology or the educational goals come first? Clearly, how to deliver high-quality online learning is a "debate in process" as the major stakeholders negotiate their various, and sometimes conflicting, interests.

The authors are both senior faculty members from two cross-global institutions of higher education who have strong commitments to increasing the availability of high-quality education. They hope that this paper has illustrated how enhancing the quality of student learning at a distance is clearly a complex function of many interrelated factors: program design; program delivery; teaching approach; and the quality of teacher, student, and administrative support provided by the institution. In order for institutions to ensure the quality of their distance students' learning, they must commit to developing quality integrated institutional support systems for faculty members and students involved in their "distance classrooms".

Notes on Contributors

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References

Ally, M. (2004). Foundations of educational theory for online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (p. 5). Athabasca University, Alberta, Canada: Creative Commons.

Anderson, T. (2004). Toward a theory of online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (p. 2). Athabasca University, Alberta, Canada: Creative Commons.

Berge, Z. (1995). Facilitating computer conferencing: Recommendations for the field. *Educational Technology, 35*(1), 22–30.

Biggs, J. (1999). *Teaching for quality learning at university.* Buckingham, England: SRHE & Open University Press.

Brigham, D. (2001). Converting student support services to online delivery. *International Review of Research in Open and Distance Learning, 1*(2). Retrieved March 15, 2001, from http://www.Icaiap.org/iuicode?149.1.2.6

Brookfield, S. D. (1986). *Understanding and facilitating adult learning.* San Francisco: Jossey-Bass.

Brookfield, S. D. (1990). *The skillful teacher.* San Francisco: Jossey-Bass.

Brookfield, S. D. (1999). *Discussion as a way of teaching.* San Francisco: Jossey-Bass.

Brown, S. (2002). Online tutoring. *Technologies Centre Senior Management Briefing,* p. 2. Retrieved June 26, 2002, from http://www.etutoringbriefingl1

Burge, E. (1994). Learning in computer conferenced contexts: The learners' perspective. *Journal of Distance Education, 9*(1), 19–43.

Caffarella, R. S. (2002). *Planning programs for adult learners: A practical guide for educators, trainers, and staff developers* (2nd ed.). San Francisco: Jossey-Bass.

Caffarella, R. S., & Zinn, L. F. (1999). Professional development for faculty: A conceptual framework of barriers and supports. *International Journal of Innovative Higher Education, 23*(4), 241–254.

Caplan, D. (2004). The development of online courses. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning.* Athabasca University, Alberta, Canada: Creative Commons.

Carliner, S. (2002). *Administering distance courses taught in partnership with other institutions.* Retrieved January 23, 2002 from http://www.westga.edu/~distance/ojdla/summer42/carliner42.html

Chickering, A. W., & Ehrmann, S. C. (1996). Implementing the seven principles: Technology as lever. *American Association for Higher Education Bulletin, 39*(7), 3–7. Retrieved May 5, 2004, from http://www.tltgroup.org/programs/seven.html

Davies, G., & Stacey, E. (Eds.). (2003, February). Quality education @t a distance. *Proceedings of the IFIP TC3/WG3.6 Working Conference,* Geelong, Australia.

Feenberg, A. (1999). *Distance learning: Promise or threat?* Retrieved March 5, 1999, from http://www-rohan.sdsu.edu/faculty/feenberg/TELE3.HTM

Gallant, G. M. (2000). Professional development for Web-based teaching: Overcoming innocence and resistance. *New Directions for Adult and Continuing Education, 88,* 69–78.

Garrison, D. R. (1997). Computer conferencing: The post-industrial age of distance education. *Open Learning, 12*(2), 3–11.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 87–105.

Harasim, L. (1999). *A Canadian virtual university: Models for an online national learning network* (Industry Canada Report, p. 2). Burnaby, British Columbia, Canada: TeleLearning Network of Centres of Excellence, School of Communications, Simon Fraser University.

Heckman, R., & Annabi, H. (2003). A content analytic comparison of FTF and ALN case-study discussions. *Proceedings of the 36th Hawaii International Conference on System Sciences.* Retrieved February 8, 2005, from http://www.alnresearch.org/data_files/articles/full_text/heckman03.pdf

Hicks, M., Reid, I. C., & George, R. (1999, November). Designing responsive online learning environments: Approaches to supporting students. *Proceedings of the Annual Joint Conference of the Australian Association for Research in Education and New Zealand Association for Research in Education,* Melbourne, Australia. Retrieved July 27, 2005, from www.swin.edu.au/aare

Hiltz, S. R. (1994). *The virtual classroom: Learning without limits via computer networks.* Norwood, NJ: Ablex.

Howell, S. L., Williams, P. B., & Lindsay, N. K. (2003). *Thirty-two trends affecting distance education: An informed foundation for strategic planning.* Retrieved September, 24, 2003 from http://www.westga.edu/%7Edistance/ojdla/fall63/howell63.html

Hutton, S., Wiesenberg, F., & Stacey, E. (2002). *Quality online participation.* Paper presented at the Research in Distance Education 5 Conference, Deakin University, Geelong, Victoria, Australia. Retrieved 20 July, 2005, from http://www.deakin.edu.au/education/RIPVET/

Hutton, S., Wiesenberg, F., & Stacey, E. (2003). *Teaching and learning online* (CD Recording No. CD1012). Geelong, Victoria, Australia: Learning Services, Deakin University.

Jarvis, P. (1999). *The practitioner-researcher.* San Francisco: Jossey-Bass.

Johnson, D. W., & Johnson, F. P. (1997). *Joining together: Group theory and group skills.* Boston: Allyn & Bacon.

Keierleber, D. L., & Hanson, S. (1992). A coming of age: Addressing the career development needs of adult students in university settings. In H. D. Lea & Z. B. Leibowitz (Eds.), *Adult career development* (pp. 312–339). Alexandria, VA: National Career Development Association.

Kiely, R., Sandmann, L. R., & Truluck, J. (2004). Adult learning theory and the pursuit of adult degrees. *New Directions for Adult and Continuing Education, 103,* 17–30.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall.

Koszalka, T. A., & Ganesan, R. (2004). Designing online courses: A taxonomy to guide strategic use of features available in course management systems (CMS) in distance education. *Distance Education, 25*(2), 243–256.

Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood.* San Francisco: Jossey-Bass.

Murphy, E., & Coleman, E. (2004). Graduate students' experiences of challenges in online asynchronous discussions. *Canadian Journal of Learning and Technology,* 30(2), 5. Retrieved October 15, 2004, from http://www.cjlt.ca/abstracts.html

Pajo, K., & Wallace, C. (2001). Barriers to the uptake of Web-based technology by university professors. *Journal of Distance Education, 16*(1), 70–84.

Pappas, J. P., & Jerman, J. (2004). Future considerations. *New Directions for Adult and Continuing Education, 103,* 91–96.

Palloff, R., & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching.* San Francisco: Jossey-Bass.

Parker, N. K. (2004). The quality dilemma in online education. In T. Anderson & F. Elloumi (Eds.), *Theory and Practice of Online Learning* (pp. 1–26). Athabasca University, Alberta, Canada: Creative Commons.

Pratt, D. D., (1998). *Five perspectives on teaching in adult and higher education.* Malabar, FL: Krieger.

Quality Assurance Agency for Higher Education. (2002). *Distance learning guidelines.* Retrieved June 13, 2002, from http://www.qaa.ac.uk/public/dlg/guidelin.htm

Rodriquez, F. G., & Nash, S. S. (2004). Technology and the adult degree program: The human element. *New Directions for Adult and Continuing Education, 103,* 73–79.

Salmon, G. (2000). *E-moderating: The key to teaching and learning online.* London: Kogan.

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1991). *Improving higher education environments for adults.* San Francisco, CA: Jossey-Bass.

Sork, T. J. (2000). Planning educational programs. In A. L. Wilson & E. R. Hays (Eds.), *Handbook of adult and continuing education* (pp. 171–190). San Francisco: Jossey-Bass.

Stacey, E. (1999). Collaborative learning in an online environment. *Journal of Distance Education, 14*(2), 14–33.

Stacey, E. (2002). Social presence online: Networking learners at a distance. *Education and Information Technologies, 7*(4), 287–294.

Stacey, E., & Rice, M. (2002). Evaluating an online learning environment. *Australian Journal of Educational Technology, 18*(3), 323–340.

Stacey, E., Smith, P. J., & Barty, K. (2004). Adult learners in the workplace: Online learning and communities of practice. *Distance Education, 25*(1), 107–123.

Stacey, E., & Wiesenberg, F. (2002). Educational partnerships online: Global collaborative learning through an online student exchange program. In D. Passey & M. Kendall (Eds.), *TelE-learning: The challenge of the third millennium* (pp. 337–344). Boston: Kluwer.

Stacey, E., & Wiesenberg, F. (2004). Online cross-global educational partnerships: A personal, institutional, and international relationship building process. In P. Klinck, S. Mitchell, & J. Burger (Eds.), *Worldwide partnerships for schools with voluntary organizations, foundations, universities, companies, and community councils* (pp. 65–86). Lewiston, NY: Edwin Mellen Press.

Wiesenberg, F. P. (1999). Teaching online: One instructor's evolving "theory of practice". *Adult Basic Education, 9*(3), 149–161.

Wiesenberg, F. P. (2000). A critical appraisal model of program evaluation in adult continuing education. *Canadian Journal of University Continuing Education, 26*(2), 79–109.

Wiesenberg, F. P. (2004a). Designing and co-facilitating online graduate classes: Reflections and recommendations. *Canadian Journal of University Continuing Education, 30*(2), 41–59.

Wiesenberg, F. P. (2004b). A study of Canadian adult learners' media preferences. *Journal of the Centre for Research Studies,* 11, 231–256.

Wiesenberg, F. P., & Hutton, S. (1996). Teaching a graduate program using computer-mediated conferencing software. *Journal of Distance Education, XI*(1), 83–100.

Wiesenberg, F. P., & Stacey, E. (2001). *University of Calgary–Deakin University pilot course-sharing evaluation report* (Faculty of Continuing Education Internal Report). Calgary, Alberta, Canada: University of Calgary.

Wilson, G., & Stacey, E. (2004). Online interaction impacts on learning: Teaching the teachers to teach online. *Australasian Journal of Educational Technology, 20*(1), 33–48.

Zemsky, R., & Massy, W. F. (2004). *Thwarted innovation: What happened to e-learning and why.* Philadelphia: The Learning Alliance at the University of Pennsylvania. Retrieved June 15, 2004, from http://www.thelearningalliance.info/Docs/Jun2004/ThwartedInnovation.pdf

Zinn, L. M. (1998). Identifying your philosophical orientation. In M. W. Galbraith (Ed.), *Adult learning methods: A guide for effective instruction* (pp. 37–72). Malabar, FL: Krieger.