

Personal, Political and Pedagogical: Female Faculty and Values-Based Learning Design

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Abstract

The present paper generally reflects the experiences of 47 female faculty members in higher education and their use of technology to enhance teaching. There are five vignettes from five faculty members at a large university to illustrate how core values about teaching and learning may be embodied in the design of technology-enhanced learning environments.

The conferencing worked so well for the students. Their assignment was to find a scenario... and a website that could address (and evaluate) that scenario... post this information into a conference and share the information with each other... I was trying to encourage them to interact in that form, believing that... they can... use web-based conferencing as a means of accessing further education and this would give them some of those skills that they can use later...

TD-1

Faculty of Medicine and Oral Health

In this excerpt from the findings in the study described in this paper, TD represents a growing community of female faculty in higher education, who use technology-mediated communications to model a way of acting in practice and relationship with others. In this paper, the accounts of five of these faculty illustrate how core values about teaching and learning may be embodied in the design of technology-enhanced learning environments.

Introduction

A substantial literature base explores female learners' historically uneasy relationships with learning technologies (Campbell, 1999). As Spotts, Bowman, and Mertz (1997) have observed, while most studies have investigated "possible gender differences in education, computer use, attitudes towards computers, math and sciences... only a few have addressed potential gender differences related to faculty use of and attitudes toward instructional technology in higher education" (p. 425). This study explores the experiences of female faculty use of technology in instruction and proposes that faculty are more likely to integrate technology in their learning designs if the methods and the delivery technology clearly fit or are aligned with their instructional goals.

Alongside Clark's (1994) model, which contrasts delivery technology with instructional technology, three areas of research that are beginning to provide a clearer picture of the instructional goals of female faculty appear to be as follows:

1. the exploration of teaching styles in post-secondary contexts (c.f. Lacey, Saleh & Gorman, 1998);
2. critical feminist pedagogy (c.f. Kimmel, 1999); and
3. the emerging literature on female instructors in technology-mediated post-secondary environments, (c.f. Bryson & deCastells, 1998; Nawratil, 1999).

Taken together, these frameworks provide constructs for collaborative conversations (Feldman, 2000; Hollingsworth, Dybdahl, & Minarek, 1993) as shared in this paper.

The collaborative conversations and focus groups sessions resulted in a rich set of data, the analysis of which was based on a grounded theory approach. One intended outcome is a growing and connected community of practice that may lead to alternative models of instructional support and more critical and profound instructional practice *with technology*. As reconceptualized in the late 90's, Grounded Theory is an appropriate framework for feminist research as it has gone beyond its original objectivist tendencies and now supports a social construction viewpoint that is more interpretivist in nature. Charmaz (2001) notes that the constructivist emphasis on "action and process, meaning and

emergence” complements grounded theory as it encourages a synthesis of multiple concepts to make new meaning in ways that may lead to social action.

Theoretical Constructs

Teaching Styles

Teaching styles include elements of core personal beliefs and values about the nature of teaching and learning transactions (cf. Kember & Gow, 1994); that is, understandings about the roles and relationships of all actors, content, and activities in the learning environment (Koper, 2001). Several studies demonstrate that teaching styles develop over time.

Types of Teaching Styles

Over the past decade, a number of instructional profiles related to teaching styles have emerged. May Oi and Stimpson (1994) proposed the following three: the highly structured *guided learning*, which is teacher-led and content-centered; the teacher-dominated *exposition style*; and *inquiry-based*, in which teachers are involved with students in a variety of ways including role-plays and simulations; the intent of which is to emphasize a deep understanding of content. Teaching styles may be dynamic. For example, instructors may adapt their style to the instructional context. Lacey and her colleagues (1998) found four style personalities that are based on the two dimensions of sensitivity and inclusion (Heimlich & Norland, 1994): they are *experts*, *providers*, *facilitators*, and *enablers*.

Experts are subject-centered and didactic instructors. Providers are learner-centered, and are in control of students’ learning. Facilitators are open and flexible, and their teaching practices are defined by their subject matter. Finally, enablers seek to empower learners through involvement in learning projects. Viewing themselves as learners alongside their students, for enablers relationships tend to be of critical value.

Most teaching style concepts reflect teacher, content and learner interactions. Teaching style concepts appear to fall on a continuum from teacher dominated, teacher-centered to learner-centered approaches with personal agency as an integral component. In other words, the individual selecting, defining or directing the teaching/learning transaction is the agent. Should there be values-based gender-related teaching styles, then, the question to ask is, “Whether core values about teaching and learning are present in the teaching styles of female faculty designs of technology-mediated learning environments?”

Teaching Style Preferences of Female Faculty

Endres and Schierhorn (1992) argue that men and women teach similarly, but that women in particular describe a preference for participatory teaching styles in which students become involved in coaching relationships, and gain opportunities to define and participate in their own assessment.

Lacey and others (1998) found that men in their study preferred a provider style. A provider style suggested that the teacher ‘knew best’ what learners needed and that they had the information required to satisfy those needs. Females however preferred an enabler style that allowed learners to define what they needed to learn, and how they chose to learn it, as well as decide on the process for exchange. While none of the men in this study indicated a preference for the facilitator style, five percent of the women saw their role as an opportunity for experiencing knowing; that is, to be learners themselves.

In their study of *constructivist* teaching styles and values reflected in technology-mediated teaching, Robin and Harris (1998) found that the level of schooling and sex were positively correlated with teaching style. The authors found that more women than men (1) held learner-centered beliefs about teaching, (2) were more likely to follow process or motivation paradigms, and (3) asked students to learn in collaborative modes. Elijah (1996) suggested that women faculty tended to embed curricular and instructional decisions in their students’ personal experiences and understandings, and their own. Elijah’s observation has been supported by Robin and Harris’ (1998) conclusion that teachers who prefer to learn more concretely and experientially themselves are more learner-centered in their teaching styles.

In the past decade several studies describe female faculty teaching approaches and beliefs as likely (1) to place high value on interactions with students, (2) to be concerned with critical pedagogies, (3) to invest a significant proportion of academic time in preparing to teach and, (4) to use a broad range of evaluation techniques (c.f. Hensel, 1991; Kulis, 1997).

Middleton (1993) characterizes the embodied contexts in which women may prefer to study and teach as based on the “relation of actual daily experience to larger social or moral patterns... the value of nurturance and caring in themselves and their work” (p. 114).

Feminist Pedagogy

The literature on critical feminist teaching in academia aligns the research on preferred teaching styles of female faculty with Maher’s (1987) description of feminist pedagogy. This literature focuses on participatory teaching (Lacey, Saleh & Gorman, 1998), consistent with Kimmel’s (1999) proposition that “one mark of a feminist classroom (is) that the personal is not only political but often pedagogical” (p. 62). Faculty in both Maher’s and Kimmel’s studies described their instructional decisions as reflective of their teaching philosophies. In the present study, critical feminist pedagogy provides a useful, values-based framework in which to discuss female faculty members’ instructional decisions within technology-mediated environments.

In general, feminist pedagogues describe their classrooms as collaborative, process-based, experiential, egalitarian, interactive, empowering, connected and relational, and affective as well as rational (Davis, 1999; Gunter, 1995; Kimmel, 1999; Maher, 1987; Nawratil, 1999; Tisdell, 2000; Weiler, 1998). Learners and faculty are encouraged to “seek connections between course content and their own lives, (see) their lives in a larger social perspective... (and) employ experiential activities” such as discussion seminars and small-group activities (Kimmel, 1999, p. 67).

Feminist educators are committed to effective instructional delivery of course content, model relational skills, and attend to issues of self-efficacy. In other cases, they stress critical thinking skills so as to encourage social activism as evidence of effective pedagogical practices. Online classroom learning designs can reflect the values stated above.

Women Teaching With Technology

By its nature (e.g. atemporality) the Internet has been described as a democratic medium with the potential to mediate power hierarchies between students and faculty by eliminating certain social cues such as age, culture, physical appearance, and time and space available to all learners. Leveling out learning playing fields can be done through eliminating or blurring gender identity characteristics and communication patterns (Campbell, 1999).

Bruffee (1993) characterizes such patterns of conversations as *connected knowing* and a site for constructing knowledge. This aspect of conversation reflects its centrality in the constructivist environment; because dialogue is a cognitive process in which learners work together to decenter, moving beyond personally held views to construct new and expanded representations (Fosnot, 1996), resulting in transformed classroom relationships (Slatin, 1992).

Given the hierarchical culture of post-secondary institutions, faculty may have trouble re-conceptualizing their roles in terms of creating participatory and democratic environments. However, research conducted by several feminist theorists celebrates a kind of pedagogy that embraces constructivism, participation and democracy within the classroom (and outside). In the virtual classroom online conversations may provide both a pedagogical framework and a strategy for collaborative knowing. Pedagogically, online conversations emphasize extensive, and sustained interaction that can be more student-centered than teacher-controlled (Kearsley, Lynch, & Wizer, 1994). However, if online environments are to mediate the problems of access and power imbalances, then they must be designed and facilitated to address inequities inherent in such learning fora.

Embedded in critical theory, feminist pedagogy emphasizes the value of a classroom environment that is relational (that is, emphasizing relationships between teacher and students, and among students themselves), experiential (that is, focusing on personal experience rather than abstract knowledge), and non-hierarchical (that is, centered on students rather than the teacher).

Stanley-Spaeth (2000) points to web-based environments that make use of such technologies as discussion fora,

message boards, and electronic mailing lists to support the notion of learning as constructed by culture and interactions with others. According to the author, the learner is not be perceived as a passive recipient of knowledge in the teaching/learning process. In other words, teaching and learning in *democratic* environments can empower both teachers and learners to discover their unique voices.

Research suggests, however, that the Internet may actually magnify or exacerbate power inequities in some cases, for example, through uneven access to technology and information resources, because of designs that underlie the privilege of the “dominant” (Western) culture or maintain Western cultural patterns of discourse (cf. Herring, Johnson & DiBenedetto, 1992; Stewart, Shields & Sen, 2001; Yoon, 2001). For example, Turkle (1995) describes chat rooms where participants use strategies like gender-neutral pseudonyms so as not to reveal their sex.

Having an online presence however does not guarantee females an *authoritative* presence. Herring and her colleagues (1992) found that when female faculty on an academic listserv posted 30% of the total messages online both male and female participants criticized them. Patterns of this sort appear to be related to social expectations for authority in the public and private spheres of discourse. The questions important to this investigation were as follows:

1. Do the instructional goals of female faculty correspond to their core values about teaching and learning?
2. Will the designs of technology-mediated learning environments as described by female faculty reflect their core values and beliefs?

Method

Background Information

Academic Technologies for Learning (ATL) is an academic service unit in a large, research-intensive Canadian university (University of Alberta). Periodically this unit surveys teaching faculty regarding their attitudes toward (and use of) learning technologies in undergraduate, graduate, continuing professional development, and non-credit courses and programs.

Data from the 1997-98 survey revealed gender-related tendencies in the use of technologies for teaching, learning and research. In the survey, female faculty indicated preferences for using technology to accomplish the following: (1) improve their teaching, (2) increase interaction with and among learners, (3) encourage collaborative research work, (4) extend the learning opportunities for their students, (5) increase access to alternative sources of expertise, and (6) support diverse learning needs (see Campbell and Varnhagen, 2002, for the full analysis).

At that time Campbell and Varnhagen explored the above findings using Clark’s (1994) framework for examining instructional technology by distinguishing between two parts, delivery technology, namely equitable distribution of instructional materials and instructional technology. (referring to underlying pedagogical strategies). For example, a faculty member who decides to use a tool such as a listserv without first determining why and how it will be used has aligned with delivery technology. A faculty member who first decides to encourage student interaction, and then chooses a Web-based conferencing tool to facilitate discussion, has elected instructional technology to be followed by the delivery technology. It was assumed that the female faculty responding to the survey could be more inclined than their male colleagues to select the instructional method of interest followed by the delivery technology. Based on the findings from this survey, Campbell undertook to explore more deeply female faculty’s experiences with learning technologies. This paper is one of a series that will reflect these experiences through multiple theoretical lenses (c.f. Campbell & Gramlich, 2002).

Participants and Study Design

In two years (1999-2001), a series of semi-structured interviews with four focus groups occurred on the campus of the University of Alberta. A convenient sample of 47 female faculty members from Canadian universities and colleges participated in the current study. On average, 42% of the faculty had taught for ten years or more; 13% were not teaching at the time, or held administrative positions and so were released from teaching. Of 47 participants, 28% did not hold tenure-track positions. The disciplines and ranks of the participating faculty members are illustrated in Table 1.

The participants represented 16 departments from the University of Alberta, 2 were from a university college, 1 from an eastern Canadian university and 1 from a northern college. At the University of Alberta the following departments participated in the study: Medicine, Engineering, Education, Nursing, Agriculture Forestry and Home Economics, Law, Extension, Science, Rehabilitation Medicine, Business, Arts, the Library, Human Resources, Native Studies, Physical Education and Recreation, and Faculte St. Jean. The disciplines of psychology, philosophy and adult education were represented by the colleges and the other Canadian university. The faculty ranged in age between 32 and 64, with the majority (45%) in their mid-forties. Of these faculty members, three had taught more than 2 online courses at three academic levels: undergraduate, graduate, and professional areas.

Table 1. Female Faculty Participation by Rank and Discipline¹

| | Health- allied | Science & Tech. | Human- ities | Social Sciences | Central academic or support unit | <i>Totals</i> |
|--------------------------------|-------------------|--------------------|-----------------|--------------------|---|---------------|
| Lecturer or Adjunct | 4 | 2 | 2 | 1 | 1 | 10 |
| Assistant Professor | 4 | | 3 | | | 7 |
| Associate Professor | 1 | 2 | 4 | 2 | 1 | 10 |
| Professor | 5 | 2 | 1 | 2 | | 10 |
| Professional Administrative | 1 | 1 | 2 | 1 | 5 | 10 |
| <i>Totals</i> | 15 | 7 | 12 | 6 | 7 | 47 |

Procedure

Participation in the study was solicited through several means:

- Female participants registered in ATL workshops received an email request to participate.
- Each female faculty member with whom ATL has worked on course development or program evaluation received a phone call and an email request. Each was asked to recommend colleagues who might be willing to participate.
- Several calls for participation were posted on ATL's discussion list (ATLNet), which had over 600 subscriptions at the time.
- A personal written invitation to all female faculty was mailed through the office of Human Resources at the university.

Female faculty who were willing to participate were contacted directly by telephone, when the thrust of the study was explained. Initial contact was followed up with a mailout of a one-page summary of the project, accompanied by a copy of the human subject ethics clearance letter. A week later each interested faculty member was invited to participate in a focus group, or a semi-structured interview (or both). At that point, consent to participate was secured.

On the day of the conversation the participant received the full research proposal, and an approved consent form to be signed and returned. Permission to audiotape each conversation and focus group session was secured. As principal investigator, I guided each conversation as a graduate research assistant took written notes. This trained research assistant was directed to take written notes while I audiotaped the interview. The focus groups, which I did not attend, were led by an experienced graduate student and audiotaped, while a second team of two other students took written notes. That is, for each interview I obtained a voice recording and one set of written notes; each focus group was recorded by audiotape and two sets of written notes. Each conversation and focus group session was transcribed and the transcripts returned to the participants for verification and accuracy of information. These strategies ensured triangulation.

The Analysis

Although participants were invited to collaborate in data analysis, in the belief that this process would support a reflective cycle and encourage the development of a community of practice, only two responded. In the end, a decision was made not to include participants in the analysis. Transcripts were analyzed systematically for key ideas. The obtained data was subsequently grouped according to patterns originating out of the data. In the results' section, the findings from the present investigation are presented thematically, along with follow-up discussion to bring about coherence and continuity to the current findings.

Results: Four Themes

In this paper, four interrelated storylines are embedded in the narrative of core values and beliefs of female faculty. The female instructors relate their goals and *intentions* to instructional decisions. In this study, the female faculty illustrate how their core values align with instructional goals and teaching styles resulting in decisions about how and when to integrate technology.

This section examines the use of online classrooms by participating female faculty and provides a basis for discussion and interpretation of their account of teaching through technology at the University of Alberta. This section is organized by four recurring and interrelated themes as were evident in participants' conversations:

1. Learner-centeredness
2. Safe social learning communities
3. Co-constructing personal and political knowledge through communities of practice
4. Transformation of relationships via access and equity

Theme 1: Learner-Centeredness

In the excerpt included at the beginning of the paper (TD-1), TD reports that she supports students' learning concerns through self-directed learning experiences, and recalls how she intended that learners develop skills that were knowledge, process, and technology-based. A community that encouraged critical reflection was central to this goal. She models professional practice as inquiry-based, collaborative, reflective and sustainable over time and distance. Facilitating the course is a personal research project in which she investigates the kind of technology-supported environments and tools in which learners will have "more control over their circumstances and learning" (TD-2).

DF, an instructor in an online doctoral program for nurse practitioners, relates diverse learner needs and preferences to the issue of social equity in face-to-face classrooms. According to this instructor the physical and temporal separation of instructor from learner and learner from learner was initially antithetical to her own learning and teaching style, and to her understanding of nursing as a "verbal, interactive culture of relationship" (DF-1). As the course unfolded, however, she realized that "some of the students who are doing very well are students who wouldn't do as well in the classroom". She acknowledges that a traditional classroom structured by time and physical presence "clearly advantages the individual who can synthesize quickly and think quickly and speak more reactively than reflectively" (DF-2). She

describes an encounter with one participant whose success she attributes to having “space to think in”, although DF “never would have picked (her) out as somebody who would do well in this course”. She describes a second student who, though “usually quite verbal (in face-to-face classes)...” is not very present online” (DF-3). DF is concerned that online learners be able to “modify themselves” to different environments and that online instructors design experiences that different learners can adapt to their own strengths.

Some faculty with whom I have worked to design online environments worry that an asynchronous environment may disconnect some learners from their preferred ways of learning, the instructor from her preferred way of teaching, and learners and instructors from each other. Aware of this tension, before she designed her course TD conducted a survey of learning preferences of dental hygienists studying at a distance concluding that they wanted a model that fit them, rather than their having to fit their lives around institutional demands such as attending fixed classes or completing a full-time residence. In short, they wanted to do it “at home at their own time or at night in their own community - a mixture of both” (TD-3).

At the same time, however, many respondents were uncomfortable with a learning design that did not support their emotional and cognitive needs. Instructors such as TD and DF struggle with these tensions – flexibility vs. structure, individual vs. group learning, and environments that give new voice to some and silence others. Burge (1990) found similar tensions in a course that was delivered at a distance to female adult learners in northern communities in Canada. Students found their “voice in a safe place through virtual classroom technologies”, but instructors missed familiar cues that would have helped them to support their students. Burge described the discomfort of “distance mode teachers who value the holistic approach of connecting the cognitive and the affective, the political and the personal, the private and the public” but “do not have visual and kinesthetic cues to help them determine class members’ reactions” (p. 13-14).

DF co-teaches a course with its original author, and was initially resistant to a completely asynchronous delivery, where mature learners from as far away as Pakistan interacted with participants from both remote and urban areas in Canada. Although she acknowledged that an online discussion based on structured readings gave her “more ability to meet different student learning needs online” she felt that just one mode of interaction “would be a really unsatisfying way to learn” (DF-6). Hesitant at first to suggest design changes that she felt met everyone’s perceived need for affiliation, DF finally integrated teleconference calls and synchronous online chats into the course, because “it gives us a sense of when we exist as a class and we’re all out in cyberspace, that we’re together”. Once connected verbally, “the social interaction piece... enabled a whole bunch of other stuff” (DF-4) that enhanced the intellectual conversation.

Discussion 1: Learner-Centeredness

Learner-centeredness is both a value and a design philosophy. Learning design and process support teaching-learning roles that are flexible and fluid. Kimmel (1999) embeds a more learner-centered approach in issues of power, emotions in learning, social responsibility and action, and diversity. Negotiation is one process that characterizes a collaborative learning environment in which the instructor and the learners interact to (1) determine content and process, (2) set learning goals, (3) seek and provide formative feedback that is enacted in process decisions, and (4) develop alternative or multiple strategies to evaluate learning.

From a constructivist view, the learning environment is the site for exploring multiple identities and confronting social responses to diversity. Designs that value individual differences conform to the enabler style. The enabler teaching style is based in a social constructivist paradigm that perceives learning as a negotiated social activity (Lacey and others, 1998; Robin & Harris, 1998). Therefore, learner-centered design does not start from content or instructional outcomes formed without reference to learner needs and expectations. Learner-centered values in design begin with constructivist approaches such as problem-based learning, supported by delivery and instructional technologies such as CMC, locate action and accountability in the learner and value a coaching/mentoring relationship between instructor and learner. In this model, resources are made available in a “problem space” and the learner is encouraged to develop a plan of action to use those resources, in a social context, to resolve a problem of practice. In particular, TD used this model to encourage dental hygienists to become social activists for dental health in their practice communities.

Theme 2: Designing Safe Social-Learning Communities

Both TD and DF designed and redesigned courses to better meet their own and their learners’ needs. This sensitivity is

typical of a teaching style that is relational and inclusive. For an instructor who aims to create safe, social learning communities computer-mediated communications (CMC) can be both comfortable and appropriate choices for the purpose of instruction.

MH develops programs in public legal education as a project of social activism. She has evaluated ways to increase public access to legal information since the early years of online forums. To her, building social, active, learning communities is enabled and enhanced by email and threaded discussions. This goal, however, has conflicted with the more “project-management” orientation of her government partners, who have demanded “that things were being delivered on the contract and using the (online) meetings to find out why they weren’t” (MH-1).

A task-orientation style has not been associated with female discourse in online forums (cf. McConnell, 1994); MH and her colleagues from the education sector were disappointed that there was little process orientation. According to MH talk about project management subverted her goal of online community development for social change. But to her government partners administrative talk was aligned with traditional and assumed ways of working with others. As they were the project funders there was a power differential and, because their goal was related to policy rather than to transformative practice, it was easy for them to impose their traditional communication practice on a new communication and social paradigm.

Instructional technology as a powerful transforming agent is realized through the encounter of one female faculty, WF, who is an ethics educator. In one of her classes in which learners engaged explicitly in collaborative writing activities with her, she was able to encourage intra and interpersonal knowledge and growth of the participants who would have otherwise felt alienated and disembodied. WF shared a statement from one of her students that supports this idea of profound personal learning.

... she said that it was very important course for her in terms of her own thinking and development of her ideas... and then the last sentence said... 'I think it's the only course where I was weeping at the keyboard'... this was an important thing, not so much the content, but what she was learning about herself and her own sense of what practice was... I had to pause and say 'Okay, what's teaching about? And what's the impact for students and what are we doing all of this for - the work that we do?', that somehow brings it together for me...

WF-1

As a teacher who deeply values personal contact, WF continues to reflect on the seeming contradiction of technology designs for increasing intimacy in her account about an online task in which participants wrote about an experience of having or giving a bath, a topic that opened up the possibility of intimacy.

Now I did that... with a (face-to-face) seminar group and we did get to some personal stuff but not quite in the same way... I think personal stuff comes over a series of things, so someone might have shared something about... going through a hard time with (her) marriage... that might happen in a classroom as well, but... it would happen in the hallway... the conferencing becomes... not only the discussion of the papers... because those spaces were integrated but also... they didn't have to see people that they'd shared something intimate with the next day and wished that they hadn't.

WF-2

Morrith (1996) explained differences between male and female ways of learning and teaching as a contributing factor in differences in attitudes toward computer-enhanced learning, noting that “feminist epistemologies and computer-based technologies are frequently in tension with each other” (p. 6). Why have these female faculty engaged CMC approaches in their goal to value the personal and the social as frameworks for learning, and what have they learned about the dynamics of the environment that make it safe and transformative?

Many of the female faculty members in this study used the online conversations to encourage multiplicity by lifting the writing restraints of a traditional course. Spender (1995) describes such an inclusive electronic culture in which “everything is shifting; meanings are multiple and elusive. There is no longer the same need for standardization, for definitions of spelling, pronunciation, and meaning...” (p. 23) that have marginalized or excluded some learners. To depressurize the academic environment and ‘grow’ the community DF and her partner encouraged an interaction style that valued process and substance over “correct” form.

We have one whose English is... not perfect. We said that we weren't going to evaluate postings on typos and grammar and hitting the wrong keys and stuff like that... we (described) our own feelings in different contexts like that and I think that really helped them... And as people began to share that, then other people said 'I'm really glad you said that because I was feeling that way too'... Although we didn't use the word 'safe' I think the result was that they do feel quite safe.

DF-5

WF also discovered that teaching collaboratively increased her own confidence with such a public/ intimate environment.

I think we became more organized as to how to engage the students differently, we used learning partners, and we got them involved with small groups more... N. took part of the leadership and the teaching of that course so we talked things over and... I think I got a little bit more used to the conferencing and to say when it was appropriate for me to... get in to the conference, and also to allow the students to do their own thing...

WF-3

The view that technology prevents community by separating and isolating members is belied by the accounts of these faculty; that it enhances interaction and working relationships is a recurring theme supported by the literature (c.f. Ryser, Beeler, & Mackenzie, 1995). DF agrees that "you get in a classroom and then you're gone and people get busy. So I think that for all its (CMC) shortcomings... it may be easier to communicate... because there isn't any real class" (DF-6). BT, who both teaches business courses and manages a diploma program talks about the success of a collaborative project that depended on a virtual environment

... we did a whole project virtually across the country. And... this one moment where it occurred to me that I hadn't met all of my partners... was just the most awesome moment. Here I thought 'I'm going to look forward to meeting so and so, because when we go to Ottawa I'll meet them'. But it hadn't really occurred to me before that I hadn't really met them because I knew them intimately through email and faxes and everything else that we were using.

BT-1

TH, a teacher educator who replaced portions of a school-based experience with a "virtual field trip" talked about CMC as a means to extend and to personalize a face-to-face classroom discussion. Echoing BT, TH noted with some surprise that, whereas in a regular classroom the students may not learn each other's names and not feel badly about it, in a blended environment they were more anxious to associate faces to the names of participants in the online discussions because the online space seemed somehow more intimate.

The literature on teaching styles and feminist pedagogy agree that the more learning-centered the teacher the more likely she is to listen to, learn from, and redesign the environment for learners whose needs are not being met in the classroom (c.f. Beardon & Worden, 1997). For example, based on learner feedback about social isolation, DF describes the evolving ways in which participants and instructors can all be present to each other, for example using email to make appointments to meet in the chatroom, pairing with each other spontaneously for support, and using the telephone.

Online discourse, which depends on text for social cues, may lead to inappropriate and destructive exchanges among participants. To prevent this occurring DF, as did all the instructors represented here, took care to negotiate social protocols in advance of the online discussion. The protocol included "rules" for how to disagree, acceptable and unacceptable language, tone, length of responses (for example, if a posted response was longer than one "screen" it was attached as a document to the message), agreement on the amount of "social chat", conventions such as spelling, etc. DF and her colleague actively moderated the discussions, and in some cases redirected conversations, taking up personal issues by private email, and intervened in exchanges that had the potential to negatively affect the community.

Discussion 2: Safe Social Learning Communities

An online environment may balance out power differences related to physical appearance, age, sex, inarticulateness, culture, and personality. For example, in a face-to-face classroom individuals who require a longer time to reflect before responding may never be able to contribute in a classroom dominated by those who act more quickly. In other

groups an older learner may be provided more “space” in which to speak because other participants feel inexperienced in comparison. While online classrooms without a visual component may enhance social interaction (c.f. Berge & Collins, 1993) doing group work, consciousness-raising, allowing contradictory and diverse perspectives, easing isolation, navigating emotional exchanges and silences without visual cues, and preventing dominating discourse may present problems (Nawratil, 1998). The ‘reduced social cues’ hypothesis has become accepted as an explanation for what has been characterized as ‘anti-social on-line behavior’ (cf. Hawisher & Selfe, 1998; Sproull & Kiesler, 1991; Zhao, 1998), and argues for the strong presence of a facilitator, a role taken by DF and her teaching partner.

These female faculty found that online forums encouraged a deeper expression of sharing of the personal and the emotional, which lead to the establishment of communities in which the learning is about oneself as much as it is about content and professional practice. The work of electronic community building is the hard work of developing meaningful and equitable social relationships in which the affective is intertwined with the intellectual (Kimmel, 1999). Braidotti (1998), however, warns about the paradoxes and the dangers of new forms of “disembodiment” presented by these technologies.

However, online teachers whose values lead them to design for engagement and social discourse will find ways to sustain a nurturing learning community even when they feel emotionally separated from their learners. As WF observed, these communities reflect a higher degree of attenuation than face-to-face classrooms (Herring, 1996; Turkle, 1995). For many, learner-centered goals are located in the view that knowledge is constructed with others in a community; and that all learning is social. This point was borne out by Robin and Harris (1998), who found that teachers who used technology in their study and who preferred learner-centered styles were more social constructivist in their worldviews. This suggests that encouraging the development of active relationships that may continue in parallel to the course-located conversation space could sustain and support learners and instructors who feel socially isolated. A non-graded, voluntary “chat room” is a common feature of online discussion environments. These rooms may remain active some time after the course has been completed. Other faculty described the addition of synchronous activities in response to the affective needs of a community.

Theme 3: Constructing Personal And Political Knowledge Through Communities Of Practice

They may not all have had the language of social constructivism, but the female faculty in this study used pedagogical approaches that were process-based, active and inclusive; that used and valued personal experience as knowledge resources; that attempted to even out intellectual and power hierarchies; and that modeled ways of thinking, doing, and being in a social world (c.f. Hugo, 2000).

For TD, social responsibility is embodied in her teaching style. In a health discipline structured through a power hierarchy the dental hygienist’s learning and practice has been politically marginalized. TD uses technology to encourage her learners to become agents in social change and policy decisions (Tisdell, 2000). In one course she reported having worked hard to find ways to encourage participation in the classroom: “first of all we walked through a step by step process for working through a... dilemma in an ethical decision making process and then I had them do... group projects for their ethical dilemmas group paper” In another course she had them become involved in leadership projects where they identified a “health related issue that dental hygienists can make a contribution to” (TD-4). For example, in a strategy common to feminist distance educators (Nawratil, 1999), the participants made contact with women in their own communities by identifying a community agency with whom they could work to develop or propose an evidence-based action that dental hygienists could take to contribute to a health related issue. An expected learning outcome of evidence-based leadership action contributes to the learning assessments.

She describes the design for one section of the course that encourages the development of personal agency as “they’re working with a community agency - communicating with me and with each other in their own conference forums” (TD-5). An unmonitored web conference was provided for the self-evaluation component of the assignment. Personal agency is thus modeled and supported through the course design in which participants develop “political” strategies through collaborative conversation.

Similarly, TH developed a course design that would model “the ways that (the learners) could think about integrating the technology in their own teaching... having them engaged with kids and teachers virtually, they were still getting those experiences that I had counted on before as being quality ones, but then also learning to be more comfortable and

confident with the technology” (TH-2). For a final assessment they were given the opportunity to create a technology-based project to use in their own teaching. The formats of the assessments were negotiated with TD in advance. For example, one group of students collaboratively developed a WebQuest to be used with an elementary class and provided a written reflection on their learning during the process.

TH’s idea of constructing a way to “do, think, and be” through an online community provided the basis for a collaborative process of course design that was based on five problems of practice.

...the problems came out of my students at the beginning of the year when I would ask them what questions they had about social studies... when I asked the teachers what they thought pre-service teachers needed to know about social studies... all very practice-based questions...”

TH-3

A problem-based approach emerged from the authentic experiences and questions of others and from her own experiences as a social studies teacher. TH framed the course development process as a personal problem of practice, modeling teacher action research for her students and school colleagues, “...having read all of the literature...about problem based learning in terms of technology... helped me to get some labels to it (the learning design)... put some boundaries on it, to clarify what I meant by it and so...the problem based learning aspect of it has become more of a central piece of it” (TH-4).

With abused women and related service and legal agencies, MH and her colleagues have developed an online resource and community forum through which women in crisis can make informed decisions and their service providers can quickly access legal information and strategies for action. The intention to empower women through the sharing of personal experience and the opportunity to learn about information technology through information technology is inherent in the design. This is an example of first focusing on instructional technology (the pedagogy or outcome) that is then enabled by the delivery technology.

...technology has completely transformed the way we can do public legal education. It’s been such a paradigm shift that it’s hard to even say what’s best about it because it’s so completely different in many ways from the opportunities we had before...instead of small activities that are only accessible to small groups of people, we can now undertake things that are accessible to thousands...It’s original motivation was community building, networking, getting people working together better...

MH-2

MH sees technology as a tool of social transformation in the justice system.

...as we’re recreating our justice system, criminal and civil, we’ve got new tools for making it happen. And if we had more people...on the technology, I think we could do a much better job on the new think on justice. And if we could get that all working together, it would be a major revolution in how we use that social institution at the center.

MH-3

DF talked about using the technology to recreate a culture as a way of being in relationship with others in her practice community. To improve interaction in the community she and her partner experimented with online synchronous chats and telephone conferences at the mid-point of an asynchronous course.

They like that, because they get that ability to act in relationship, but they aren’t asking for it as much now as they were...they’re increasingly familiar with how to use the technology...I’m sure if I felt a big improvement then it also improved my interactions online too.

DF-7

In other words, once the delivery technology became transparent all the participants, including the instructors, could focus in on the learning inherent in the conversations. In the belief that the learning community itself negotiates the learning process, DF and N blended technologies and approaches, and work hard on modeling the form and process of conversation. She said “everybody’s working at how they’re posting... it’s harder for the students because they’re trying to make points with postings and we’re just trying to keep the conversation going” (DF-8).

DF described a challenge of online communities acknowledged by both the constructivist and feminist communities, the power of electronic communications to reveal “knowledge-making in the classroom, and reveal transformations in classroom relationships” (Slatin, 1992, p. 30). The fourth theme discusses power and authority, common themes for these women.

Discussion 3: Constructing Personal and Political Knowledge

That meaning is a function of how the individual creates it from his or her unique experiences with the world and values about them is an important epistemological assumption of constructivism (Jonassen, 1992). Young (1997) characterizes this process of knowledge generation as a narrative, where “human beings who live in language, live in a multiverse rather than a universe” (in Kanuka & Anderson, 1998, p 60). That is, those for whom the constant collaborative conversation described by Feldman (2000), Hollingsworth (1986) and others frames the ways in which they interact in the world to actively construct meaning through multiple perspectives and understandings.

Because it involves pre-planning and writing, online conversation is a cognitive tool that may encourage and enhance deeper thinking. In addition, in contrast to the ephemeral nature of the spoken work, the discourse remains in a concrete and accessible form. Participants may revisit the transcripts of their conversations numerous times, perhaps constructing new meanings each time. Faculty with whom we have worked have described the use of the CMC transcripts as “formal” texts in their classrooms and note, as well, that they appreciate the experience of “watching the thinking actually unfold”. Compatible with a social constructivist view, the negotiation of assessment rubrics (what is a quality response?) is both a metacognitive strategy and an opportunity to model expert thinking in the discipline.

Winkelman (1997) described the electronic hermeneutic that evolved from the online forum in her work with abused women, in which they used the forum to tell their story of domestic abuse, support other storytellers, and together make meaning out of the power inequities that shaped their relationships. MH told a similar story about the potential of technology to encourage story telling as a transformative process.

... We had judges, prosecutors, kids, social workers, probation officers, teachers, religious people who had never been in a room together... first thing everybody needed to do was to tell their stories... A second theme was building villages... we had to rebuild the communities for kids... We did manage to get some money out of them to do some work on (a web) site, and so we're starting with the telling stories and trying to get the kids' stories up because that's what everybody was saying... 'we're not hearing from the kids, we have this system and everybody is talking about where are the kids?'

MH-4

In human history, public storytelling has often served as a political strategy to achieve personal and social transformation. These female faculty encouraged the sharing of personal action and change through the narrative forms that are supported through online threaded discussions.

Theme 4: Transforming Traditional Power Relationships Through Access And Equity

In this study, issues of access were foregrounded in stories of transformed institutional relationships: access to technology, to learning, and to each other. Faculty tried to find ways to sustain a learning environment in which all learners despite location, age, sex, politics, experience, and technology awareness had equitable opportunities to learn. In other words, access became a learning design issue.

As a typical enabler TD “started down (the) road of becoming interested in Distance Ed as a student - as a learner” and as a teacher because of her own experiences. She was aware that increasing access to educational opportunities is a double-edged sword, as her students can also be denied access because of experience, location, and learning designs that do not take adult women’s needs, for example for interdependence, into account (c.f. Blum, 1998; Burge, 1998). Relating the negative experiences of several of her students to the “support... or design difficulties” of an online course from another institution, TD turned to the adult learning literature to find that “greater success is achieved when the students are prepared for the method in which the education is going to be delivered” (TD-5). In her subsequent design decisions she included plans for student support for learning with technology to improve their cognitive and affective experience.

DF, for whom “learning as fun” was a consistent thread, enlisted the help of a colleague who developed a ‘technology playground’, containing numerous technology readiness activities that were made available to online participants around the clock. She accepted that though technical support doesn’t have much to do with the content of the course, “it has been really critical” to learning. She realized that while some students were workplace learners with access to support systems in their own Faculties others, such as the participant in Pakistan, had no technical support in her learning environment. For example, although she felt that a videoconference would support the relational, conversational culture of Nursing, “it’s got to be equals for everybody. So if nine people can hook up and one person can’t, then nobody gets to have it”.

Based on collaborative working groups, DF’s concern for equity determined a physical separation of participants, even if they lived in the same community. There were also issues “of dynamics that go on in a local place. And we really wanted to make sure that the woman in Newfoundland and in Pakistan, who are the furthest away, didn’t feel any more isolated than they probably already feel” (DF-9).

For these women inclusivity is related to equity as a tenet of design. MH is sensitive to problems of self-efficacy common to certain social communities, which she addresses by aligning herself with nonknowers. She described going into meetings strategically, saying, “I don’t understand how this stuff works’ and I do it to make myself less intimidating to people too so that they’re then able to say ‘Well I don’t either’”. Other faculty included themselves as learners about technology. Because she wanted to model a way of teaching, TH felt that her skill level was inadequate. Even though she did not characterize herself as expert at the beginning of her induction into technology-based learning design, she felt that she “should be able to help with anything that the students needed help with and if it was learning how to use the tools, I just felt that I was too much of a novice at it myself”. She felt that she “needed to develop my own technological skill. I needed to put my money where my mouth was basically and take some initiative from my own professional development...” (TH-5). Because both DF and TH were willing to place themselves in a role that is risky for faculty they were able to design empathetically, anticipating support and access issues.

Finally, BT described managers’ access to their employees’ online learning forums as an ethical question related to power relationships inherent in knowledge management. Although she had been asked in the past, she does not provide employer access to the class discussions in which their employees are involved.

(There are) all sorts of power relationships that are involved and there’s all sorts of implications for people’s positions within the organizations... So when I develop these programs, I’m always raising these questions that I know in the corporate sector are absolutely taken for granted... I shouldn’t be judged while I’m learning by anybody other than my instructor, if even...”

BT-2

Discussion 4: Transforming Power Relationships

The constructivist classroom is by definition democratic, a place where all accounts count and questions of whose knowledge and authority surface and inform the social discourse. Yet, the constructivist teacher is often in conflict with the culture of the post-secondary institution as he/she tries to “share power, empower students, and still be responsible to the institution for creating the syllabi, student assessment; support for (competitive) awards” (Kimmel, 1999, p. 66). Slatin (1992) relates this tension in the electronic classroom to the textualizing of classroom discourse by “the transformation of traditionally ephemeral classroom talk into text by means of interactive written discourse (which) does not simply re-organize knowledge of subject matter, then. It changes relationships among people by changing their relationship to knowledge” (p.32). That is, once conversation is made tangible through the permanent discussion transcripts, relationships can be critically examined. These relationships can shift the power to make knowledge from the instructor, previously the only intellectual authority, to the learning community who co-constructs knowledge with the instructor.

For Patricia Gilliken (1997) access to technology for learning is related to political questions of social power: “like other valuable commodities in society, it will go to the already privileged first. Race, gender... class and religion, all influence access in unjust ways. Part of computer pedagogy, in other words, must be computer activism” (p.2). Computer activism played out in several different ways for these women.

The use of communications technologies to support communities raises the question of the genderization of these

technologies. Burge (1990) reminded us “frameworks and gender-sensitive criteria for assessing technologies are needed. Educators should take into account the fact that many women cannot get access to technology or capture enough time to participate consistently” (p 16). Many of the faculty were aware of the ironies inherent in their learning designs that, on the one hand, encourage collaborative conversations, and on the other, decrease access, flexibility and inclusion. As they have all felt excluded themselves these faculty are sensitive to, and determined to address, problems of access. Although prior needs assessment is not often undertaken at the beginning of a course, a survey that addresses access issues, including access to facilities in which the learning can be supported at a distance, can help faculty avoid issues of exclusion.

Conclusions

Implications of the Study

I believe that faculty teach from their personal epistemological and values frameworks, and that these frameworks are implicit in their learning design decisions and practices. The stories of the female faculty shared in this paper reveal core values that are enacted in their interactions with learners in the classroom and online.

The learning designs described here tend to reflect core values that may be described as *relational*. Park (1996) locates these designs in learner-centered approaches such as class discussion, cooperative learning, experiential learning, fieldwork, group projects, student-developed activities, and peer assessment. These female faculty represent challenges to traditional approaches to instruction through the adoption of learning-centered strategies and models. These models are enacted through the development of technology-mediated communities in which relationships are the source of learning and doing.

The women in this study tended to describe their instructional approaches and decisions as arising from personal experiences and beliefs about the nature of learning and their places in that context. They designed and acted from the personal. For these faculty the pedagogical reflected the political in the sense that their course designs emerged from personal understandings about the relationships inherent in knowledge and practice communities and were based on equity and access to the content, to opportunities to interact and grow with others; to shape one’s own learning; and to technologies that bring these possibilities within reach. Successes are shared in stories of personal and social transformation, in some cases paralleling a transformation in students’ emerging appreciation of communities of practice, illustrated by this student’s email request.

Dear Professor D, I know it’s a hectic time to bring up this suggestion... but really, I just came across an idea... about setting up a website or something like this conference room where the main purpose is long term. We all could communicate with each other once we graduate...

Inquiry that is “dialectical, with different views fusing to produce new syntheses that in turn become the grounds for further research, praxis, and policy” (Olesen, 2000, p. 216) is at the core of feminist research and practice. Accordingly, the participants helped define problems of practice through collaborative conversations, which were framed *as* emancipatory, participatory, egalitarian and iterative in nature. This approach contributed to a goal of faculty development through transformative learning, by supporting critical reflection as the central process.

Critical reflection is essential if educators are to develop their pedagogical practice, a process that includes both personal and professional growth. Cranton (1996) defines growth as a developmental process that “requires moving beyond the acquisition of new knowledge and understanding into questioning our existing assumptions, values, and perspectives (p. 76), a view that supports Lacey, Saleh, and Gorman’s (1998) conclusion that becoming aware of their own learning and teaching styles may be crucial in enabling teachers to adapt their approaches to increase students learning.

Endnotes

1. This total does not include focus group participants. Attendance at these sessions was not registered.

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