

# *Quality online participation: Learning in cmc classrooms*

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## **Introduction**

As colleagues, we began our learning journey into the world of online teaching by instructing the first two online courses in a recently developed graduate program called the Master of Continuing Education: Workplace Learning (MCE). After six years of instructing in this program, we have grown in our understanding of how adult students learn in a computer mediated conferencing (CMC) learning environment, while also working full-time. This experience has challenged us in many ways to examine our own learning and knowledge about what constitutes quality participation generally, and in online classroom environments in particular.

Adult students are increasingly returning to part-time studies through non-traditional programs that utilize a CMC approach. When not familiar with CMC, both instructors and students sometimes struggle with finding their ‘voices’ online, a struggle that can hamper their subsequent learning within a ‘virtual’ classroom. How can instructors foster students’ quality participation and subsequent learning? What are the cultural differences in student needs? Gender can be seen as one of the important aspects of cultural differences in communication (Tannen, 1990; Simons, 1989). Gender differences in communication in traditional face-to-face (F2F) classrooms and the disparity of treatment by teachers between females and males has been well documented (Sadker & Sadker, 1994; Spender, 1995). Inquiring into gender, and other cultural learner differences in CMC environments is important to understanding and fostering quality participation. In this paper, we explore our teaching/learning experiences in the MCE graduate program based in Alberta, Canada that is primarily taught online to adult students across Canada and Southeast Asia. Our goal is to describe what we have learned about facilitating our students’ learning within this online environment.

## **Background to the MCE Program**

The overall goal of the MCE is to produce graduates who have a broad and critical perspective of the field of “workplace learning and leadership,” and an appreciation of the linkages between theory and practice, a range of intervention skills that they can bring to organizations as workplace learning specialists, and an understanding of themselves and others as individual, team, and organizational learners.

A key design feature to the MCE is the selection of students into a cohort or self-contained group of 24 members at the beginning of their program. These cohort groups stay together in the institute and core CMC courses, but take their elective CMC courses with the larger

community of MCE students, as well as graduate students from other programs. Overall, the instructional approach is designed to: move the students from an individual to an organizational context; have students examine their own personal perspective as drawn from their experience, in conjunction to that of the experts on each topic; and to have them articulate and apply their evolving “theory-of-practice” within their own workplace setting.

### **Defining quality participation in the CMC environment**

To define quality participation in the CMC environment it is helpful to examine how quality participation in an online environment is similar or different from that in traditional F2F environments, and to explore how we enhance participation in F2F environments.

Participation in F2F programs has been well documented and defined in terms of both quantity and quality. Quantity can be measured by counting the number of verbal contributions made by each student, while defining quality participation requires an analysis of these verbal (and sometimes nonverbal) contributions: students speak less often than teachers initiate more interaction; a few students typically do most of the talking; and faculty rarely ask question that make students think. (see The Teaching Professor Weimer,1996 for a complete summary of what the research says about student participation in traditional classrooms ).

We have no reason to believe that the situation online is significantly better in most CMC classrooms that have merely adopted the technology without carefully analyzing their teaching approach. Because ‘online’ classrooms are a relatively recent phenomena, research defining quality participation in the online environment is sparse. In our efforts to examine this issue we have found Hall’s (1995) criteria on how to evaluate electronic and F2F discussions a helpful starting point. Hall emphasizes the importance of the ability to express and synthesize ideas, posting regularly and creating a supportive environment (see Hall, 1995 for more detailed accounts).Wells (1994) criteria for grading graduate level student participation in CMC classrooms has taken Hall’s a step further by noting the importance of logic, insight, referencing of others comments both acknowledgment and disagreement in appropriate manner without ‘flaming’ or sexist/racist remarks (see Wells, 1994 for a more detailed account.

We also found our understanding of quality participation and ability to enhance it expanding as we read about the similar experiences and challenges faced by other beginning online teachers, dialogued with colleagues across North America, and listened to what our students said about their online experiences.

## **Learning from our students about their experiences and values**

We learned experientially along the way from our students about what we could do in our role as teachers to increase the quality of their participation in our online classrooms. In the early weeks of their first CMC courses, students told us that they often felt lonely or isolated, out of touch with classmates, overwhelmed by the amount of self direction required, and the volume of reading required. As time progressed in this first, and subsequent CMC courses, students also disclosed to us what helped them to feel comfortable and more engaged as an online learner. They gained confidence hearing others express similar anxieties about their ability to learn online. Their comfort level increased when they shared thoughts and concerns with each other and when the instructor encouraged and supported them with private messages, as well as with public postings acknowledging the difficulty of shifting from F2F to online learning, from both a student learning and teacher instructional perspective. Students indicated that such messages told them that we were “not alone” and also expressed the sheer joy they felt in belonging to a cohort group that encouraged the joint exploration of their thoughts and feelings. Students noted that learning to cite others work and ideas, being responsible for leading or summarizing a topic discussion, the modeling of responses provided by the instructor and other students, and simply more online experience, altogether increased their overall level of comfort, helping them to feel more engaged in the learning process.

As students progressed in their CMC courses, it became important for them to learn to discipline themselves to a consistent schedule of reading and study time. As well, many noted that they became increasingly able to schedule quiet time to reflect and write about their learning in private journals. After the fact, they also realized the value of meeting and establishing personal relationships in the F2F institute. Over time, they began to value both the F2F and CMC components of the program, as they experienced an increased sense of freedom to think, challenge, share perspectives, and grow committed to their cohort group. By the end of the program, most students were fairly consistent in their view of what was gained and lost in the on-line experience, e.g. how to compensate for differences between F2F and CMC interactions. In the absence of F2F contact, they had to struggle to maintain conversational flow, as well as follow mixed threads of conversations. They were often concerned about finding ways to ensure air time for all, by balancing verbosity with brevity. They often felt that they learned more ‘deeply’ and ‘broadly’ because the text-based format allowed them to review past conversations and draw conceptual linkages not always as visible in F2F conversations. As they spent more time online, they began to appreciate how speaking and writing were quite different processes. They gained an

appreciation for learning online through metaphor, as well as imagery. Overall, students indicated that their ability to review and organize ideas, and to self-direct their own learning had increased in the online environment. They discovered they could ask for feedback, initiate conversations and engage in dialogue during times and in ways that suited them, as opposed to the teacher or institution. In summary then, our conceptualization of how quality participation is enhanced online, as well as what it looks online has evolved from this valuable student feedback, in addition to our own lived experiences.

### **Conceptualizing our experience**

On-going dialogue with each other as instructors and with our students in formal and informal conversations, as well as formative and summative evaluation feedback, experientially based articles from other online educators, all assisted us in understanding and analyzing the concept of 'quality online participation'. As we searched for a framework to organize our learnings, we discovered Berge's (1995), four roles for the facilitator of on-line learning:

1. pedagogical – (intellectual) educational facilitator who questions and probes for students responses that focus discussions on critical concepts, principles, and skills.
2. social – (affective) promotes human relationships, develops group cohesiveness, maintains the group as a unit and helps students work together.
3. managerial - (organizational) sets the agenda for discussion: the objectives, timetable, procedural rules, decision-making norms.
4. technical – (instrumental) makes students comfortable using complex technology and the software (i.e. makes the technology transparent so that everyone may concentrate on the academic task) of learning.

Of Berge's four online roles, the pedagogical, managerial and technical ones are similar to those played in the planning and delivery of traditional F2F courses. Pedagogically, the instructor acts as the students' intellectual mentor and guide, assisting them to achieve the course, as well as their own individual, learning goals. The pedagogical role online though, causes the instructor to question the concept of facilitation in terms of who questions, probes and focuses discussions on critical concepts, principles and skills. In the online environment, the effective instructor hands over many of these functions to students, who subsequently take on more active, facilitative roles. Online instructors must take a technical role by making students comfortable with any equipment being used so that they can concentrate on the learning process. In summary, although similar in process to F2F instruction, how we handle these three roles becomes more explicit and visible in the online classroom.

Berge's social role appears to be the most different from that played in traditional F2F classes. Due to the lack of non-verbal or visual social cues, the instructor must attend very carefully to the social and interpersonal dynamics of the online communication by monitoring the content and tone of textual interactions. She must work very actively to promote relationships and community, develop group cohesiveness and teamwork in order to build and foster the creation of a supportive online learning environment by being present 'behind the scenes' through the use of private messages, as well as public postings. The expert modeling of these social role behaviors allows class members to learn to take more responsibility for the online environment. These are perhaps the "new skills" and strategies most critical to becoming a successful online instructor (Cook, 1997; Dewar, 1996; Hutton, 1998,1997; Hutton & Gougeon, 1996; Hutton, King & Melichar, 1998; Katz, Wiesenbergr & Hutton, 1997;Wiesenbergr & Hutton, 1997, 1996). While, Berge, Hall and Wells' work has helped us to enhance our teaching strategies for increasing participation online, we stress the importance of instructors developing their own 'theory-of-practice' upon which to base their teaching approach.

#### **Our theory of practice**

A significant learning outcome for us, as relatively new online instructors, has been the importance of examining our key assumptions about teaching on a continual basis, as we teach and learn together. And while we each hold some different assumptions, our current collective "theory-of-practice" contains these common themes which include the importance of having a philosophical framework grounded in the principles and practices of adult development and learning theory that incorporates experiential learning, building a community of learners and consideration for diversity issues.(See Wiesenbergr (1999) for a fuller description of one author's theory-of-practice and Hutton & Gougeon (1996 & 1999) for aspects of cross-cultural and cross gender communication).

#### **Culture and gender issues in online communication**

Cultural diversity is an issue that was most dramatically brought to our attention when we began delivering the MCE in Southeast Asia. As well, we have recently entered into another partnership agreement with an Australian University, and are actively pursuing other international agreements. The implications of diverse perspectives about the teaching/learning process, and resulting online communication patterns related to cultural differences, is an important issue for our program.

Gender as a sub set of culture (Simon, 1989) is another immediate and on-going issue in our program. The aspect of gender differences in participation of women and men online, is of increasing interest as the demographic composition of adult learners changes. In North America, the proportions of both women and members of 'minority' groups particularly in adult education opportunities, has steadily increased in recent years (Powell, 1994). Our program from its inception has attracted far more women than men.

Our interest in gender discrepancies in online participation arises from our own instructional experiences and our review of related research. We know that there is a documented disparity of participation between women and men in elementary through graduate school in F2F programs (Sadker & Sadker, 1994; Orenstein, 1994; AAU Report, 1992) as well as inequitable access (Spender, 1995). Such experiences and information cause us to question whether similar disparate patterns of participation and access in F2F classrooms may continue to prevail in online classrooms. Further, discussions with other colleagues has challenged us to examine whether the text-based communication of CMC genuinely provides greater opportunities for equitable participation, and therefore if CMC instruction inherently provides a more democratic environment for women than F2F classrooms. It is our experience that this is not necessarily the case. Thus, our interest in exploring diversity of communication styles by culture in the MCE program leads us to further explore the issue of quantity and quality of participation in the CMC environment for women and men. We are currently engaged in preliminary analysis of our text-based student communication to examine these issues (Hutton & Gougeon, 1996). We have found that traditional, inequitable communication and participation patterns play out similarly in CMC as they do in F2F classrooms.

It is important then to offer a subset of strategies to enhance textual communication for both women and men. We have found Tannen's socio-linguistic framework helpful in this regard. Central to Tannen's framework is an understanding of the concept of gender. Tannen considers gender to be generally a product of socialization as opposed to sex which she notes is generally a biological distinction. Tannen's linguistic analysis of women and men's communication patterns has resulted in a theoretical structure which simply put notes that women and men are often socialized (feminine and masculine) to have different needs; women seek connection and relationships, men seek status and independence.

In our classrooms we found that quantitatively both women and men students respond more frequently to male students' comments/postings than to women's'. As well we found qualitative differences that support Tannen's framework. Female students, more

than male students, created connection by using personal names almost exclusively, being appreciative, agreeing with others, using inclusive language, being suggestive when they offered an alternative idea, personally acknowledging that these are their own ideas and not judging others, using personal stories, being relational, and expressing intrinsic motivation. Male students on the other hand, more than female students, created status by using personal names only to clarify who said what, comparing their experiences as unique, creating one-up alignments, being declarative, and being judgmental.

Thus, to improve quality and equity of participation in the online environment for women and others of non-North American cultures, facilitators must be aware of the development of such inequitable patterns when designing and facilitating online courses. Specifically, the following strategies are suggested with cultural and gender differences in mind:

- at the beginning of the course, identify the needs felt by all class members, and refer to the research findings of Sadker & Sadker and Tannen re: unearth and make explicit the assumptions behind feminine and masculine behaviour.
- discuss how such differing needs can best be met in class.
- note that since the text medium in CMC is a limited mode of communication, they all must compensate for these limitations in their writings.
- ask all students to be as personal as possible/appropriate, for example, acknowledging each other's contributions and encourage them to use first names whenever appropriate.
- more purposefully challenge and explore women's comments as equally as men's comments.

Being North American, it is important for online instructors to reflect upon such strategies and to be mindful of cultural and gender in online classrooms. In doing so online instructors can ensure that the educational environment which has traditionally been designed and organized around men and masculinity (Davis, Crawford, Sebrechts, 1999) does not remain this way to the detriment of others in the online classroom.

## **Recommendations and conclusions**

Following are a number of recommendations drawn from our insights about how to enhance quality online participation, organized according to Berge's (1995) framework for facilitating online learning and incorporating various elements of Hall and Well's work, as well as our own. To a certain extent some strategies may be equally relevant to more than one of Berge's four roles and may require adaptation for culturally diverse audiences.

### *Pedagogical role:*

- explicitly ask students to weave together and acknowledge the intellectual and personal contributions of others (classmates and expert resources).
- require students to bring their own personal experiences into discussions and critical analyses.
- give timely and sensitive feedback on all student contributions and assignments strategically using both private and public messages.
- summarize key points on-line missed by students, to make sure that all students understand foundational concepts; do not rely solely on students to read off-line assigned materials.
- connect students to cyberspace experts and other on-line knowledge source.

### *Social role:*

- send messages to discussion leaders to acknowledge and affirm their important role.
- assist students to become self directed learners by providing them with tools to "learn how to learn."
- help students to learn to depend on self and each other for ideas, information and feedback.
- bring students together F2F for an orientation to each other and the course prior to the course beginning.
- start to create a collaborative learning environment prior to delivering the course (e.g. talk to students about their individual learning goals and styles) and continue to focus on group learning goals and issues.
- develop a chatty, softer tone on-line to compensate for the lack of visual/auditory cues.
- include personal messages and use engaging, appropriate humor when possible.
- discuss how the anonymity and distance of virtual classrooms can be far more intimate than traditional classroom interactions and encourage students to reflect on how their communication shifts/changes when online.

- recognize and acknowledge ‘lurkers’, or those who do not participate in full class discussions; call on students who are not active contributors in private, not public, messages.
- design structured introductory activities (such as a personal story of introduction) that allow students to get to know one another in a non-threatening way, and build a sense of ‘community’. Model this community and relationship building with your own personal story.
- incorporate ‘chat’ or ‘café’ conferences into each course to bring students together to informally discuss course or personal issues.

*Managerial role:*

- clearly structure learning goals, assignments and on-line discussions.
- design private conferences for small group dialogues as some students will participate more readily in small group than in full class discussions.
- design relatively simple online assignments that are not too complex to execute online as group projects can easily become complex to coordinate.
- do not contribute more than 30% (maximum) of on-line comments in the full class discussions.
- acknowledge all student contributions publically using student names and privately if ‘off mark’.
- Deal with ‘flaming’, or inappropriate hostility/criticism, decisively and in private, while discussing the phenomena of ‘flaming’ in public.
- solicit feedback at various points during the course (e.g. formative feedback), as well as summative feedback in order to maximize your own learning from the experience and increase your ability to tailor the course to students’ learning needs as you go.
- deal directly with students when monologues instead of dialogues occur which may be indicating frustration with their lack of connectedness to other classmates.
- incorporate threaded discussion features (such as requiring students to incorporate related comments of previous contributors into their response before making their contribution) into the course design.
- address how the nonsynchronous, text-based nature of CMC can benefit less assertive/more reflective students who respond positively to the increased time to think and edit their on-line contributions.
- encourage students to access to a variety of library and internet resources, even though this takes additional course/student time.
- address required commitment of time for online courses as unexpected additional time requirements can be a major cause of frustration and conflict for many.

- be patient with students who do not respond promptly to messages, as you may have to wait days for responses, and do not rush in to fill every online ‘silence’.
- move misplaced messages to appropriate conferences if necessary, for more coherent understanding and logical access.
- acknowledge yet end discussions that appear to have run their course, in order to allow students to move onto the next topic.
- create and maintain an inclusive and positive learning environment in a number of active ways, from structuring and re-structuring the discussions, to prompting students to participate (and finding the right balance of participation yourself), to establishing guidelines for on-line contributions, to offering strategies of dealing with “message overload” throughout the course- much of this can be done through modeling appropriate and effective behaviors

*Technical role:*

- make available expert technical support before (to allow the building of key technical skills beforehand), during (to deal with inevitable emergencies and continue assessing with the typically steep learning curve) and after (to allow students assistance during “off hours” ) the course.
- encourage students to get online and practice at least a few weeks before the course begins, especially if they have not used the technology before.
- be aware that technical difficulties or lack of quick help lines can greatly inhibit learning and acknowledge this openly by discussing it publically before it happens.
- use complimentary distance technologies (video, audio, telephone) if needed, when possible.
- If you are not taking on the technical role, make sure that someone is assigned this supportive role and check with students on a regular basis to see that their needs are met (actually, they will let you know if any are not getting help with these and other technical issues).

In conclusion, in this paper we have described how quality participation is defined and generally achieved in traditional F2F classrooms, and how this differs online. We have described what we have learned from our students about design and delivering online courses that improve the quality of their participation. We have also described the importance of having a well-articulated ‘theory of practice’ to inform course design and delivery decisions, the importance of creating a ‘learning community’ online that recognizes cultural and gender diversity. Lastly, we have translated our learnings into a set of recommendations for enhancing learning in online environments.

As we continue teaching in the MCE program, we continue to learn from our students, colleagues, and each other. The careful examination of our past knowledge base of what works in traditional F2F environments was our starting point towards understanding what works in online environments. In the end, we have come to conceptualize the issue of enhancing quality student participation in the CMC environment primarily in terms of how teachers create learning communities that are learner-centered and collaborative. We believe that the role of instructor online is similar to the role of instructor in F2F classrooms as much of what we know works and is transferable. However, the asynchronous nature of CMC and the lack of visual cues, creates a more challenging social task for the online instructor.

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