Journal of Distance Education/ Revue de l'enseignement à distance Spring/Printemps 2004 Vol. 19, No. 1, 20-35

# Informal Learning in an Online Community of Practice

#### **Bette Gray**

### Abstract

What role can online communities play in meeting the informal learning needs of a professional association? This article presents the results of an interpretive study of the experiences of coordinators of Alberta Community Adult Learning Councils who participated in an online community of practice designed to support informal workplace learning. Through active participation and peripheral "lurking," newcomers were oriented into the skills and culture of the practice, and experienced practitioners gained new insights into their own professional identities and the meaning of their work. Telling their stories helped to develop not only identity as individual practitioners, but also served to reconstruct the identity of the collective community on an ongoing basis. Motivations to participate included an opportunity to learn new skills and work practices, a means of social and professional connection to colleagues, and a mechanism to reduce the isolation that was inherent in the job function and geographical location. The role of the online moderator was identified as critical in sustaining the online community over an extended period and enhancing the learning function.

#### Résumé

Quels rôles les communautés de pratique en ligne peuvent-elles jouer pour répondre aux besoins d'apprentissage informel d'une association professionnelle? L'article présente les résultats d'une étude basée sur les expériences de coordonnateurs des Conseils de l'apprentissage adulte communautaire d'Alberta (Alberta Commu-nity Adult Learning Councils) qui ont participé à une communauté de pratique en ligne conçue pour soutenir l'apprentissage informel en milieu de travail. Par le biais de la communauté virtuelle, les nouveaux arrivants, grâce à leur participation active et à l'observation, ont acquis des compétences et des connaissances sur la culture de la pratique, alors que les praticiens d'expérience y ont acquis de nouvelles perspectives sur leur propre identité professionnelle et sur la signification de leur travail. Pour ces derniers, le fait de raconter leur histoire a aidé non seulement à développer leur identité individuelle en tant que praticiens, mais a aussi servi à reconstruire l'identité collective de la communauté sur une base continue. Les participants étaient motivés à participer à la communauté, car elle était une occasion d'apprendre de nouvelles compétences et de nouvelles pratiques de travail, un moyen d'entrer en contact socialement et professionnellement avec les collègues et un mécanisme pour diminuer l'isolation inhérente à la fonction du travail et à la localisation géographique. Le rôle du modérateur en ligne s'est avéré critique pour maintenir la communauté sur une longue période et pour favoriser la fonction d'apprentissage.

#### Introduction

Organizations and professional associations are increasingly examining the potential of online networks to enable members to share knowledge and engage in ongoing workplace learning and professional development. Although we can draw on an established literature and research base to guide understanding and shape best practice in formal distance education settings (Berge & Collins, 1996; Burge & Roberts, 1998; Garrison & Anderson, 2003; Harasim, Hiltz, Teles, & Turoff, 1995; Haughey & Anderson, 1998; Kearsley, 2000; Palloff & Pratt, 1999), we know much less about this brave new world of online learning that is outside an instructor-studentcourse context. As Thorpe (1999) points out, most work on development and evaluation of online tools has been done in higher education so that we have little evidence for how to use the technology effectively outside this context. Although some online learning communities thrive, many fail to live up to the "great expectations" of their sponsors or providers. It is important that we increase our understanding of the functions online communities can serve in an organization and what factors influence learning and participation in these voluntary contexts.

#### The Study

The purpose of this study was to understand to what extent participants' experiences in an online environment constituted a community of practice. The study also sought to understand the nature of the informal learning that occurred, motivations for participation, and the role played by the moderator in the community.

The participants in the study included 43 coordinators of Alberta Community Adult Learning Councils who voluntarily participated in an online community over one year. In Alberta 83 Community Adult Learning Councils (formerly called Further Education Councils) coordinate community-based adult education at the local level. Each Council usually employs only one staff member: a Council coordinator. These coordinators typically are female, work part-time, and work alone in small rural communities. Widely separated by geography, they physically meet with their occupational peers only a couple of times per year at conferences or regional meetings. Historically there has been a high turnover of coordinators, approximately 21% each year, so there is a continual influx of new people to the position. This combination of geographic isolation and high turnover prompted the coordinators' professional association to explore the potential of online communication to orient newcomers and to provide ongoing support in learning the tasks of the practice.

The coordinators' professional association, in cooperation with Community Programs Branch of Alberta Learning, established a password-protected WebCT computer-mediated conferencing environment that included a Web site, private and public discussion forums, an interactive calendar, private mail, and live chat. Due to my experience facilitating online courses and my previous personal and research associations with coordinators and Councils (Gray, 1992), I was approached to serve as moderator for the pilot year. Consequently, I served as both moderator and researcher for this study.

Although qualitative research is a "situated activity that locates the observer in the world" (Denzin & Lincoln, 2000, p. 3), and a qualitative approach to inquiry does not require objectivity and distance from the data, I was conscious of how my dual role as moderator and researcher might serve as a limitation in affecting participants' responses to the research questions. This limitation was counterbalanced, however, with what Strauss and Corbin (1990) refer to as the *theoretical sensitivity* of a researcher that includes the personal and professional experiences necessary to develop an awareness of subtleties in the meaning of data and the capacity to

understand the context. From this perspective, my immersion in the online environment as both moderator and researcher enhanced my ability to understand and interpret the experiences of other participants who shared the journey. To address my subjectivity and strengthen the research credibility, I kept a self-reflective journal throughout the process to explore my presuppositions, assumptions, and biases in an effort to let the participants' meanings predominate.

The 43 participants in the study (all women) primarily were of the baby boom generation, with two thirds between the ages of 40 and 60. Over half had less than five years experience as a coordinator, and almost one quarter had been employed less than one year and so were new to the job. Most participants in the study worked in small rural communities, with almost half of these located in a village or town with fewer than 5,000 people.

## **Theoretical Framework**

Because my study focused on adults who voluntarily participated in an online environment that was connected to their job rather than on students who were enrolled in a formal course of study, I selected a framework that incorporated the concepts of adult and workplace learning. The theoretical construct of communities of practice (Lave & Wenger, 1991; Wenger, 1998, 2001; Wenger, McDermott, & Snyder, 2002) is grounded in an anthropological perspective that examines how adults learn through everyday social practices rather than focusing on environments that are intentionally designed to support learning. A community of practice is defined as "a group of people who share an interest in a domain of human endeavor and engage in a process of collective learning that creates bonds between them" (Wenger, 2001, p. 1). Communities of practice are self-organizing systems of informal learning, and they differ from other communities in three main ways. First, they focus on a domain of shared interest, and membership implies a level of competence and knowledge of that domain that distinguishes members from other people. Second, they interact and learn together by engaging in joint activities and discussions, helping each other, and sharing information. Through these interactions, they build relationships and form a community around the domain. Third, they develop a shared collection of experiences, stories, best practices, and ways of solving problems. This shared repertoire of stories and case studies becomes a common knowledge base on which they can draw when facing new situations. Whether it is a group of high school drama teachers or a community quilting club, a community of practice consists of people with a shared domain of expertise who voluntarily learn together about practices that matter to them. Shared learning and interest are what keeps these communities together: they cannot be mandated into existence, and they exist only as long as participation has value to their members.

This theoretical framework proposes that it is in these communities of practice that people learn the intricacies of their job, explore the meaning of their work, construct an image of the organization, and develop a sense of professional self. Such communities address not only the technical acquisition of skills required by a specific practice, but also the informal and social aspects of creating and sharing knowledge. In a community of practice, individuals learn to function and become enculturated into that community's practices, language, viewpoints, and behaviors.

We all belong to several communities of practice at home, at work, or through our hobbies. Communities of practice have multiple levels and types of participation, and the interplay between experienced members and newcomers is an important dimension of passing on knowledge as well as facilitating the creation of new knowledge and insight. At any one time we may be central participants in one community of practice but peripheral participants in another, and throughout time we can move back and forth between the core and the periphery. All participation, even at the periphery, is considered legitimate learning, and it is through participation that we learn not only *how to do* but *how to be*.

The original concept of communities of practice addressed learning that took place in face-to-face situations such as apprenticeships of Mayan midwives in Mexico, work-learning settings of United States Navy quartermasters, and among nondrinking alcoholics in Alcoholics Anonymous (Lave & Wenger, 1991). More recently Wenger has begun to examine how technological platforms might support distributed communities of practice given the increasing geographic distribution of employees, the global nature of work, and the reliance on some kind of technology for communicating (Wenger, 2001; Wenger et al., 2002). This work identifies challenges particular to distributed communities, including issues of visibility and presence, size, affiliation, priorities, and cultural differences. Wenger cautions that despite organizations' search for the perfect technical solution, technological features have less to do with the creation of a successful distributed community of practice than do social, cultural, and organizational issues (Wenger, 2001).

Wenger's (2001) framework suggests that there is the potential for professional associations to facilitate and enhance informal learning by providing opportunities for the development of online communities of practice. Despite the informal structure and online nature of these interactions, it is suggested that online communities of practice can provide a space for newcomers to become enculturated and learn elements of the practice, and where all members, through sharing of stories and joint problem-solving, can learn together and continue to shape not only their own identity as practitioners, but the identity of the practice itself. My study attempted to find out to what extent this occurred for the Community Adult Learning Council coordinators, what motivated their participation, and the role the moderator played in this community.

## Methodology

This interpretive study used a multimethod approach based on practices and assumptions of qualitative inquiry. Data collection sources included a review of online discussion forum postings, live chat transcripts, and e-mail correspondence between participants and the moderator; a participant survey consisting of 16 multiple-choice and seven open-ended questions; and individual on-site interviews with 11 participants selected using purposeful sampling techniques (Patton, 1990) to incorporate a range of job experience, technical skills, and comfort using Internet technologies, online participation patterns, and geographical location of employment. The data were analyzed using Wenger's (1998, 2001) communities of practice framework as my guide. The study was limited to the experiences of those coordinators who chose to participate in the online community: no attempt was made to contact those coordinators who never logged in. Informed consent to review all online transactions was obtained from all participants.

### **Findings and Discussion**

The findings in this study suggest that the online environment did function as a community of practice, where online participation not only served as a tool for informal learning situated in the context of coordinators' everyday work experience, but also that participation became important in defining identity of the practice itself. Motivations to participate included an opportunity to learn new skills and work practices, a means of social and professional connection to colleagues, and a mechanism to reduce the isolation that was inherent in the job function and geographical location. The findings also suggests that the moderator played an integral role in enhancing the functioning of the community by providing technical support, maintaining group process,

nurturing the social aspects of the community, and facilitating learning.

# Reasons for Participating

Coordinators were initially motivated to take part in the online environment to help offset the isolation of their work environment. Most coordinators in this study worked alone in small communities, worked in an occupation that was shared by no one else in the community, and worked in geographic isolation from their peers. For them the online environment represented a way to reach out and connect with others who shared a similar working situation. They were also initially motivated by a sense of professional obligation, both to other coordinators who were part of the provincial organization and toward their own Councils and learners in their communities.

After the first flush of motivation and "good intentions," coordinators who continued to participate over the longer term identified two primary reasons for coming back. Many found that the information they received and the ability to connect with peers made their job easier. The online environment represented a valuable work resource even for those who did not actively contribute through posting, but who usually just "lurked" in the background and read what was going on. Participants also kept coming back as a way to feel connected to the other coordinators and to reduce the isolation that was inherent in their job function and geographical location.

Although the study itself was limited to those coordinators who chose to participate, I was curious to know why some never did log on. In talking informally to some of the nonparticipants after the study's conclusion, three main reasons for not participating seemed to emerge. The first was a lack of familiarity with online technologies and subsequently a lack of understanding or interest in how online communication could assist their work. The second was lack of access to technology itself, including having to work with older computers and unreliable or slow Internet access. The third was a limited identification with the coordinator community itself: some of the coordinators who did not participate in the online community also did not engage in face-to-face conferences or regional activities.

# Learning the Practice of Being a Coordinator

The online community provided a virtual space where coordinators both new and experienced learned elements of their practice and gained insight into the meaning of their work. At a skill acquisition level they learned the technical aspects of their work such as course programming, recruiting and evaluating instructors, developing needs assessments and program evaluations, and filling in government forms. The community of practice "made their job easier" through interaction with a network of practitioners who were competent in this particular sphere of activity. They learned primarily through sharing of stories and discussions of problems. They also "learned by lurking" and "picked up ideas" even when they only read the online postings but did not contribute themselves. They also learned less explicit elements of their work such as acquiring the values, beliefs, and viewpoints of the practice. Many coordinators compared this type of learning to that experienced in a staff coffee room:

For us, online was the equivalent of a coffee room. We work in isolation, whereas other people have their coffee room or the lunchroom or the water cooler or whatever and we don't. If you're a teacher, you go to the staff room and everybody's teaching. Teachers have a shared professional body of knowledge and experience. They don't have to explain their job. Online was like a coffee shop where you have conversations that are work related, social related, political, idealistic, you know you have all those conversations. It was a

forum for those kind of conversations that are hugely variant.

Through these "shared histories of learning" (Wenger, 1998, p. 87), coordinators learned not only the technical intricacies of their job, but how to speak the language of the occupational group and how to behave as members. Learning was not "some special activity, for which educational institutions provide generally privileged sites, but an aspect of ongoing everyday practice" (Lave, 1992, p. 1).

# **Enculturation of Newcomers**

A key characteristic of a community of practice is that it provides for enculturation of newcomers into the practice. The more experienced practitioners, through the social process of sharing stories and examples, help the newcomers to understand and learn various aspects of the practice. The coordinators who were *Newbies* (a term of affection in coordinator culture) often spoke of the value of logging in to the online community to read and learn, but were hesitant to post initially because they felt their inexperience rendered them with "nothing to offer." When they did actively post, it was usually to ask for information about practical aspects of practice such as what courses to offer, what instructors were available, how to program for cost-recovery, or how to fill in year-end forms. For many Newbies their initial participation was peripheral, staying on the edges and lurking while learning through their online experience. These coordinators valued both the practical advice as well as the affirmation "that others were struggling with similar issues":

It seemed like it didn't have to be a monumental solution. What I saw online was a lot of comfort in people sharing whatever it was that worked for them or whatever they had. It seemed that people were sharing what they had to offer and it didn't matter if it wasn't the big fix or something like that. It was lots of small little things that worked.

The more experienced coordinators identified this enculturation of newcomers as an important component of the online community. Many empathized with their less-experienced peers and viewed the online environment as a means of providing orientation and support:

I think it would have been much easier to ask for help if CLNOnline had been there when I was a beginner. When I started, I didn't know anybody and I didn't have that sense of community. When I went to conferences I felt like there were all the people that knew each other and then there were those of us who didn't. If there was something that I should have known, I didn't feel like I should ask the Branch for help and I didn't have enough relationship with my peers so I couldn't have asked them either. I think the online community removes those deterrents since you're not so vulnerable as face to face.

As the experienced coordinators responded to the questions of the newer coordinators, this enculturation of newcomers into the practice unfolded. Through conversations and sharing stories, as well as participation from the periphery in the form of lurking, newcomers learned to become members of the community of practice. Novices gradually acquired knowledge and skills as they learned from the experts in the context of everyday activities. The role of the more experienced coordinators was to pass on important knowledge and confer legitimacy on the practices under discussion.

# **Identity and Meaning**

Another characteristic of communities of practice is that they provide members with a medium

for creating identity and making sense of and understanding their work. Wenger (1998) advocates that

Learning entails both a process and a place. It entails a process of transforming knowledge as well as a context in which to define an identity of participation. As a consequence, to support learning is not only to support the process of acquiring knowledge but also to offer a place where new ways of knowing can be realized in the form of such an identity. (p. 215)

Through their participation in the online community, coordinators explored identity questions of "who am I as a coordinator within this community?" and "who are we as coordinators within the provincial learning landscape?" Their geographic and occupational isolation served as factors that drew them to the online environment to connect with peer practitioners who understood not only the coordinator job function, but also the values of this occupational group. For the Newbies, this formulation of individual identity was especially meaningful. As various coordinators would post stories of how they carried out functions in their community, various identities of "who am I as a coordinator?" began to take shape. As one Newbie commented, "I learned there were many different forms of coordinator, and I don't have to be the same as the person who was here before me." Barab and Duffy (2000) claim that through this telling and retelling of stories, individuals do more than pass on knowledge. They contribute to the construction of their own identity in relationship to the community of practice and reciprocally to the construction and development of the community of which they are a part.

The development of collective identity was particularly important for this occupational group. The structure and purpose of Community Adult Learning Councils in Alberta are little known and poorly understood even inside the postsecondary system itself. Coordinators often spoke of "having to explain what we do." One reflected that coordinators throughout the province were a "loosely-coupled group" that was both diverse enough in job function and unable to meet often enough physically to form a sense of mutual identity. To her the online community enabled that collective identity to be forged though the ongoing connections, reflections, and sharing of stories.

A community of practice also provides a forum where members can negotiate the meaning of their work through the everyday ongoing actions of the community. As Wenger (1998) states, "In our communities of practice, we come together not only to engage in pursuing some enterprise but also to figure out how our engagement fits in the broader scheme of things" (p. 162). The conversations, stories, and interactions of the online community illustrated this characteristic as coordinators struggled to make sense of their own role and the role of Councils in the larger learning arena of adult education.

The discussion forums enabled coordinators to read and reflect on the shared stories of programming challenges and opportunities, of working with Council members and agencies, and of struggling to meet community needs with limited resources. One coordinator phrased this ability to reflect on multiple experiences as "it gave you a new level of understanding," whereas another compared her reflection to the story of the bricklayer's perspective: "are we just laying bricks or are we building a great cathedral?" In reading stories of others involved in the practice, she was able to make meaning of her day-to-day programming efforts in her small community, for she was able to situate her work within a larger purpose. She no longer viewed her efforts merely as "running some computer and first-aid courses," but instead saw them as components of a larger picture, that of building a stronger community and a stronger province. The discussions and reflection enabled her to "look at things in a different way." Wenger (1999)

advocates "an important aspect of the work of any community of practice is to create a picture of the broader context in which its practice is located" (p. 161). In this study coordinators spoke often of "gaining a larger awareness" of other Councils and how they contributed to the overall adult learning landscape in Alberta.

# **Role of the Moderator**

Although moderator functions have been identified in formal online learning (Hiltz & Turoff, 1993; Tagg, 1994; Mason, 1994; Harasim et al., 1995), less is known about the role of moderator in online communities that are inherently informal in nature. The findings in this study suggest that the presence of an online moderator helped the community evolve from a forum for sharing information to a community of practice where knowledge was constructed through shared learning.

# Participants' Perceptions of the Moderator

Data from the interviews and open-ended survey responses (where no question regarding the moderator was even asked) indicate that coordinators perceived the role of the moderator as "absolutely critical" in starting up, supporting, and sustaining the informal online environment. Participants spoke of the role of the moderator as "being the one who was always there." They valued the moderator's technical role, believing that the online environment "wouldn't have gotten off the ground" without a moderator who could help them access the system and provide technical trouble-shooting. Although participants always mentioned the technical support as part of the moderator's role, they also spoke of how the moderator managed the flow and pacing of the discussion:

There were periods where nothing much was going on and then [the moderator] would throw in a survey or throw in a questionnaire or something like that which would get everybody excited again—those things just gave a person a reason to get back on there to see if there was anything new.

The moderator appeared to sustain group process, being described as the one who "guided us and spurred us on," and who "kept it moving and kept it educational for all of us." Participants viewed the moderator as someone who helped them to learn:

I really liked how the moderator was able to keep it a learning experience. I noticed lots of times [the moderator] would say "I see that there's a theme in this. What do you think?" or whatever. That was great because even if some of us then didn't respond it was equally valuable in thinking about it, looking at it a different way or looking at the responses of those that did. That was useful.

Coordinators felt that the moderator was important "at the beginning, in the middle, and at the end": in the beginning for technical support and orientation, in the middle for group process "to notice when things were flagging," and at the end as an educational facilitator to "keep it a learning experience." They perceived that the moderator played a key role in developing the sense of a social community.

Coordinators anticipated that a moderator would be necessary in an ongoing capacity, not only to provide technical support and orientation for newcomers, but also to be present on an ongoing basis to "generate input, generate thought" and "to pop up a question or something to think about or some funny little comment or whatever to get us going again." They envisaged the moderator as "an invisible mentor with a sense of humor," as "a herder of cats who are going a bazillion different directions," as someone who created "an ongoing focus group" and who provided "more than technical support—emotional support." It was important to them that the moderator understood their working context and the nature of their community, that "she knew what they were about and what the job was like. To read and feel that 'she gets it."

## **Moderator's Perceptions**

The literature tells us that an online moderator combines the roles of technical trouble-shooter, educator, hostess, chairperson, facilitator, and community organizer (Mason, 1994; Tagg, 1994; Berge, 1995; Berge & Collins, 2000). In my experience as moderator of this community, these roles blurred into each other, and my own background, motivations, and personality shaped the role. As Paulsen (1995) suggests, my own humanistic philosophical orientation and student-centered approach to teaching influenced my vision of what the community could be and subsequently my facilitation style.

My greatest challenge as moderator in this voluntary online community of practice was to build and sustain participation while remaining sensitive to the many competing urgencies in the members' daily workplace. Lacking the power of an instructor in a credit course, I could only encourage rather than mandate participation. I sent private e-mails to thank people for their postings or to invite them to comment on a topic that I knew was relevant to their experience. Occasionally I sent private e-mails to encourage individuals to challenge the emerging community view in an effort to stimulate discussion and the exploration of alternative viewpoints. In the discussion forums, sometimes I would play the devil's advocate and describe a viewpoint that ran counter to a developing thread. I started "social" threads, unrelated to work issues in an attempt to build community. These behind-the-scenes strategies helped to establish a relationship between individual participants and the moderator, as well as to build a sense of commitment to the community and recognition of mutual interdependence.

Wenger (2001) refers to communities' need for a rhythm of events and rituals that reassert their presence over time. Although acknowledging the benefit of asynchronous participation, he points out that "the danger of a pure web-based presence for a community is its timelessness. It is always possible to participate, but by the same token, there is never a special occasion to participate" (p. 48). As moderator I tried to create those special occasions or events that would contribute to a sense of communal time and reminder of the community's presence. I created seasonal online polls that not only collected information quickly, but also provided an opportunity for those coordinators who liked to remain silent on the periphery to participate anonymously. I scheduled live chats on specific dates, and I opened new discussion threads when conversation was flagging. I was conscious of Burge, Laroque, and Boak's (2000) caution that moderators could not afford to "get trapped into the 'Atlas syndrome' of holding up the discussion world" (p. 12) and consciously waited for other voices to be heard rather than making postings every day. The ratio of my moderator postings to participant postings over the total time ended up being 1:3.

The works of Anderson and Kanuka (1997) and Burge et al. (2000) both concur that the role of the moderator goes beyond just posing problems or responding to questions. In this study the participants indicated that the moderator facilitated learning by helping them to explore issues of meaning more deeply. Moderator techniques of summarizing, weaving, and nudging the discussion to a deeper level helped coordinators to construct meaning and identity in the community of practice. In the absence of this nudging, much of the conversation might have stayed at the level of information exchange. Despite the informal nature of the learning context,

participants regarded the moderator as integral to sustaining the existence of the community of practice and enabling the experience to be of greater learning value than just a social community of interest.

# Challenges

This community of practice was not without its challenges, and participants identified some limitations and deterrents to participation. In addition to technical frustrations such as slow bandwidth and older computers with limited memory or processing power, human issues played a significant role in how the community unfolded. Coordinators repeatedly stated that a lack of time due to competing priorities was the greatest single deterrent affecting the extent of their participation. Having to go to the community Web site rather being fed information via a push technology such as an electronic mailing list made it easy to forget to log in regularly and easy to put participation on the back burner while dealing with the "tsunami" of more pressing work. Coordinators who logged in after a period of nonparticipation expressed "being overwhelmed" with the volume of postings and reported "not having time to wade through all that talk." Many new coordinators did not actively post because they felt they lacked specific experience to share and so had nothing to offer. As we move forward in developing these online communities, we may find that improving the technical environments may prove less problematic than addressing the human challenges of time pressures in busy work lives.

## **Summary**

The online community of practice in this study constituted a forum for meaningful informal learning between members of a professional association. The community was focused around a sphere of shared competence, knowledge, and interest: the work practices of the coordinators of Alberta's Community Adult Learning Councils. Through interactions, primarily the telling of stories and shared problem-solving, the members of the group formed a social community around this practice. The community was more than just a community of interest: through mutual engagement the group developed a shared repertoire of stories and cases that functioned as a dynamic knowledge source on which to base future practice. As a community of practice, the online environment facilitated a space for the learning and enculturation of newcomers as well as an opportunity for more experienced practitioners to gain new insights into various aspects of the practice and of their own professional identities as coordinators. Telling stories not only helped to develop and construct identity as an individual practitioner, but also served to reconstruct the identity of the collective community of coordinators on an ongoing basis.

In addition, participation in the online community provided members with a medium for negotiating meaning, of making sense of and understanding their work. Even peripheral lurking, where members read postings but did not actively contribute to online discussions, was a legitimate form of learning and participation. The presence of a moderator who was attuned to the cultural, social, and organizational issues of the particular practice was helpful in sustaining the online community over an extended period and assisting it to evolve beyond the level of social interaction and sharing information. The moderator appeared to play a role in deepening the learning experience for participants in such an informal context through encouraging critical reflection on workplace practices and group identity.

## **Implications for Practice**

This study suggests that professional associations whose members are geographically dispersed and/or who are engaged in occupations that are emergent or not common practice might consider

online communities of practice as a professional development strategy. In situations where individuals have few opportunities to meet face to face or few local knowledge resources on which to draw, the online environment may provide an opportunity for orientation of newcomers and shared best practice.

Second, organizations that are planning to develop online communities of practice are encouraged to use a moderator to facilitate the process. The moderator performs varying roles at various stages throughout the process (Salmon, 2000), and these roles encompass the technical, organizational, social, and pedagogical functions identified by Berge (1995). Effective moderating strategies help to sustain the community through the anticipated ebbs and flows of interactivity and to facilitate the learning that is a critical dimension of the experience. Key characteristics of a moderator include technical competence, an understanding of community-building and developing social connections, a learning orientation, and sufficient knowledge of the practice itself to demonstrate credibility.

Note

The online community of practice that was piloted in this study is currently in its fourth year of operation. It continues to be regarded by its members as a valuable resource for workplace learning and staying connected to the provincial practice.

### References

Anderson, T., & Kanuka, H. (1997). On-line forums: New platforms for professional development and group collaboration. *Journal of Computer-Mediated Communication*, *3*(3). Retrieved January 29, 2001 from

http://www.ascusc.org/jcmc/vol3/issue3/anderson.html Barab, S.A., & Duffy, T. (2000). From practice fields to communities of practice. In D.

Jonassen & S. Land (Eds.), *Theoretical foundations of learning environments* (pp. 25-56). Mahwah, NJ: Erlbaum.

- Berge, Z.L. (1995). Facilitating computer conferencing: Recommendations from the field. *Educational Technology*, 15(1), 22-30.
- Berge, Z.L., & Collins, M. (Eds.). (1996). Computer mediated communication and the online classroom, vol. 2, Higher education. Cresskill, NJ: Hampton Press.
- Berge, Z.L., & Collins, M.P. (2000). Perceptions of e-moderators about their roles and functions in moderating electronic mailing lists. *Distance Education: An International Journal, 21*(1), 81-100.
- Burge, E., Laroque, D., & Boak, C. (2000). Baring professional souls: Reflections on Web life. *Journal of Distance Education*, 15(1). Retrieved January 15, 2001 from http://cade.athabascau.ca/vol15.1/burge.html
- Burge, E., & Roberts, J.M. (1998). *Classrooms with a difference: Facilitating learning on the information highway*. McGraw-Hill.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (2000). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Garrison, D.R., & Anderson, T. (2003). *E-learning in the 21st century: A framework for research and practice*. New York: RoutledgeFalmer.
- Gray, E. (1992). *Living in the world of non: Women's experiences as further education coordinators*. Unpublished master's thesis, University of Alberta.
- Harasim, L., Hiltz, S.R., Teles, L., & Turoff, L. (1995). *Learning networks*. Cambridge, MA: MIT Press.

- Haughey, M., & Anderson, T. (1998). *Networked learning: The pedagogy of the Internet*. Montreal, QC: Chenelière/McGraw Hill.
- Hiltz, S.R., & Turoff, M. (1993). *The network nation: Human communications via computers* (rev. ed.). Reading, MA: Addison-Wesley.
- Kearsley, G. (2000). *Online education: Learning and teaching in cyberspace*. Belmont, CA: Wadsworth.
- Lave, J. (1992, April). *Learning as participation in communities of practice*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Mason, R. (1994). Using communications media in open and flexible learning. London: Kogan Page.
- Palloff, R., & Pratt, K. (1999). Building learning communities in cyberspace: Effective strategies for the online classroom. San Francisco, CA: Jossey-Bass.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Paulsen, M.F. (1995). Moderating educational computer conferences. In Z.L. Berge & M.P. Collins (Eds.), *Computer-mediated communication and the on-line classroom in distance education*. Cresskill, NJ: Hampton Press. Retrieved February 21, 2002 from http://www.emoderators.com/moderators/morten.html
- Salmon, G. (2000). *E-moderating: The key to teaching and learning online*. London: Kogan Page.
- Strauss, A.L., & Corbin. J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Tagg, A.C. (1994). Leadership from within: Student moderation of computer conferences. *American Journal of Distance Education*, 8(3), 40-50.
- Thorpe, M. (1999). *New technology and lifelong learning*. Retrieved January 11, 2000 from http://www.openuniversity.edu/lifelong-learning/papers/
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Wenger, E. (2001). Supporting communities of practice: A survey of community-oriented technologies. Retrieved October 30, 2001 from http://www.ewenger.com/tech/
- Wenger, E., McDermott, R., & Snyder, W.M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.

**Elizabeth (Bette) Gray** is a learning and technology consultant for the Stakeholder Technology Branch of Alberta Learning. She completed her doctoral program in the area of informal online learning in the Department of Educational Policy Studies at the University of Alberta. Bette has taught postsecondary online courses for several years and has worked extensively with technology professional development for K-12 teachers. She can be reached at bettegray@shaw.ca.