Communities of Practice and Students' Professional Development

Catherine H. Monaghan and Norina L. Columbaro Cleveland State University

The application of Communities of Practice (CofP) can potentially serve as an effective learning strategy for higher education classrooms by contributing to student professional development while fostering a desire for life-long learning. The purpose of this qualitative study was to assess the effectiveness of this learning strategy and help educators understand how integrating CofP experience in the higher education classroom can help students become more engaged in lifelong learning. Students involved in CofP during two different graduate courses provided their reflections on this learning strategy through their papers and journals. Findings indicated that, despite the often individualistic nature and constrained graduate course environment, participants felt that the use of CofP was beneficial for enhancing relationship skills and acquiring knowledge about topics of interest quickly and effectively.

"What type of career can I have if I get this degree?" This is the primary question of students in higher education today. It is an important question because the era of cradle to grave employment is gone. Therefore, it is valuable to give students strategies for seeking lifelong learning opportunities. The challenge of higher education in the 21st century is to provide academic rigor while fostering students' professional development in the workplace (Attle & Baker, 2007). The use of Communities of Practice (CofP) as a learning strategy in higher education can be an effective means of contributing to students' professional development while fostering the desire for lifelong learning. During their professional careers, students will need to engage in learning outside the formal classroom setting, especially in the context of their professional lives. CofP can prepare them for their careers because they "create value by connecting the personal development and professional identity of employees to the strategy of the organization" (Wenger, McDermott, & Snyder, 2002, p. 17).

CofP are composed of individuals connected by a common passion or problem. As a community, they explore ways to build expertise about their common interests. CofP are currently used in the corporate world to enhance professional development of employees (Wenger et al., 2002), as an alternative method for corporate training models (Choi, 2006), in the field of health care (Conner, 2005), as well as in education (Wenger, 1998). "Interest in communities of practice (CofP), which is a community that shares and creates real knowledge is increasing" (Choi, 2006, p. 143). However, the impact of using CofP as a learning strategy for students in higher education has not received much attention in the literature.

The principal researcher developed a learning strategy incorporating CofP in graduate classes, as a tool to enhance students' professional development. To address the gap in the literature, this research assessed the effectiveness of this strategy from the learners'

point of view in a higher education context. The following questions guided this study:

- 1. How did the learners' experiences of CofP in a graduate level class affect their learning and professional development?
- 2. How does this experience of CofP compare to other types of collaborative learning?

This study contributes to the knowledge base by examining the learner's experience of this strategy as both an activity and learning opportunity. Finally, it provides an assessment of the potential effect on the way learners engage in learning and professional development in higher education.

Literature Review

This section discusses the relevant literature as background to this study about CofP. It reviews definitions of lifelong learning and professional development, explores the literature on self-directed learning and collaborative learning in general, and delineates the aims of CofP.

Some common threads run through this literature. The first is the theory of situated learning (Lave, 1993; Lave & Wenger, 1991). Situated learning's core idea is that learning is, by its nature, a social activity. Used as a framework for creating learning, it stresses the intersection of the learners, tools, activities, and the social context of the learning situation (Hansman, 2001). The second thread, the constructivist paradigm, is also instrumental. In this paradigm, "Learning is an active process of constructing a system of meanings and then using these to construe or interpret events, ideas or circumstances... [emphasizing self-direction as] the combined characteristics of active inquiry, independence, and individuality in a learning task" (Candy, 1991, p 278, emphasis in original). Constructivism stresses how shared meanings are

created among learners as they construct knowledge on individual and collaborative levels, within sociocultural contexts using meaningful activities (Hung, Tan, & Koh, 2006).

Both situated learning and constructivism generate recognition of the need for authentic activity and assessment, involving actual situations rather then simulated ones (Wilson, 1993). One example of authentic activities and assessment would be apprenticeship education (Lave, 1993). McLellan (1994) suggests that "context can be the actual work setting, a highly realistic or 'virtual' surrogate of the actual work environment, or an anchoring context such as a video or multimedia program" (p. 8). Situated learning design elements anchored in the constructivist paradigm provide authentic contexts stressing the use of knowledge in real life. They include activities that support collaboration while using authentic assessment relating the learning to the real-world tasks (Herrington & Oliver, 2000).

The effectiveness of the CofP approach is rooted in the authenticity of the context (Innes, 2006) where the transferability of skills across multiple subject areas is a key characteristic of authentic activity (Jonassen, 1991). "When learning is embedded in authentic contexts, student can connect their own experiences within the learning environment to their previous experience and their future experience working in organizations" (Innes, 2006, p. 752).

Professional Development and Lifelong Learning

"Effectiveness as a professional is based on applying a body of knowledge [and] it is critical that professionals keep current with the latest ideas and techniques in their fields" (DeSimone, Werner, & Harris, 2002, p. 351). Professional development can include formal education in a higher education context, continuing education, and engagement in professional associations and conferences. Many students return to school to maintain their professional skills in an ever-changing economic environment. Therefore, it is critical for higher education institutions to help students engage in professional development while they acquire academic knowledge. Barab and Duffy (2000), citing Senge (1994), point out the need to create "practice fields in which students in schools engage in the kinds of problems and practices that they will encounter outside of schools" (p. 126). Kohl (2000) reported, in the first decade of the 21st century, estimates are that "one third of all jobs [in the US] are in flux each year, meaning that they have recently been created or soon will be eliminated from the economy" (p. 13). Scholars report that professional development is a primary concern for

students at both the undergraduate and graduate levels (Busacca & Wester, 2006; Jackling, DeLange, & On. 2007).

The knowledge base in many fields is changing rapidly. Those who consciously strive to engage in lifelong learning will obtain the most success in their careers (Olesia & Simona, 2006). Chalmers and Keown (2006) argue that lifelong learning includes more than technical skills training. They suggest, along with Bell and Gilbert (1996), that lifelong learning involves professional, personal, and social development (Chalmers & Keown, 2006). In 1980, the ERIC database added the term lifelong education to the Thesaurus defining it as the "process by which individuals consciously acquire formal or informal education throughout their life spans for personal development or career advancement" (Chalmers & Keown, 2006, p. 140).

Self-Directed Learning

Professional development requires employees to use self-directed learning skills. Merriam (2001), citing Tough's (1967, 1971) research in this area, self-directed learning "widespread...occurs as part of adult's everyday life... [and] is systematic yet does not depend on an instructor or a classroom" (p. 8). The literature provides a rich discussion about the definition of self-directed learning. Tough (1979) and Knowles (1975) viewed it as learner driven within a "context of the systematic process of designing such activities" (Merriam & Brockett, 2007, p. 138). The PRO model developed by Brockett and Hiemstra (1991) draws attention to the individual's internal characteristics that "predispose one toward taking primary responsibility for the learning" (p. 29). Finally, Candy (1991) divided self-direction into two domains: learner centered, where the learner has primary control of the learning with some teacher control and "autodidaxy, in which no teacher is present and the learner may not even be conscious that he or she is learning" (as cited in Merriam and Brockett, 2007, p. 139).

Regardless of the focus of the definitions, selfdirected learning is an important skill for lifelong learners. Educators and administrators in institutions of adult and higher education need to consider "the potential exponential effect of self-directed learning" (Black & Henig, 2005, p. 26). CofP can contribute to adults' abilities to be self-directed while providing a synergistic method for acquiring and applying knowledge. However, before proceeding to a discussion of the concepts of CofP, we will focus on collaborative learning as another means of helping learners acquire knowledge.

Collaborative Learning

Organizations value the skills of employees who are able to work effectively as part of a project or team. Employers are even more interested in employees who contribute to the creation of a learning organization to help them maintain their competitiveness (Senge, 1990). To prepare students to engage in successful careers, many institutions in both graduate and undergraduate classrooms are using group projects, team-building exercises, and other community learning models. Educators recognize and value the enhanced learning that occurs with the use of these types of strategies.

There are many forms of collaborative learning in use in the educational arena. One form is a group project to complete a pre-determined assignment. In this instance, the educator establishes parameters; learners divide the work and then assemble the parts for the finished project. A second form might be a teambuilding exercise. Here, the purpose is not to complete a project, but to build a spirit of trust and cooperation among the team members. An example of this type of experience would be Ropes Courses. "Ropes Challenge Courses are often used in conjunction with other forms of training or education, such as in physical education, in orientation programs, and for staff development" (Neill, 2006, ¶6). Team building in the organization or classrooms is similar to team building in sports. Individuals may be talented, however, people need "to learn how to pool their individual abilities and energies to maximize the team's performance" (Forsyth, 2006, p. 161).

Collaborative inquiry is a third "Collaborative inquiry is a systematic process consisting of repeated episodes of reflection and action through which a group of peers strives to answer a question of importance to them" (Bray, Lee, Smith, & Yorks, 2000, p. 6). These inquiries could occur in many settings, from formal education to one organized by the learners, perhaps for professional development. The focus on collaborative learning in higher education has become a dominant paradigm both in the literature on on-line learning and in group work with students in face-to-face situations.

Communities of Practice

A learning strategy that advances beyond these of group projects, discussion, teambuilding is CofP. This strategy provides forums that meet learning needs as they arise. Given the need for institutions to prepare learners for careers, professional development and tools to engage in lifelong learning, this strategy can be a powerful tool for educators and administrators at all levels.

The basis of this strategy is the formation of communities who create knowledge for the community members, as well as managing this knowledge for others outside of the community (Wenger et al., 2002). Lave & Wenger (1991) introduced the concept of CofP as learning that occurs in real-life, real-time contexts. Organizations striving to be learning organizations are developing and applying this concept (Marsick, Bitterman, & Van der Veen, 2000). CofP shift the focus from individual acquisition of practical skills and knowledge to the development of one's identity as part of a profession (Lave, 1993). The identity work is a motivating force, "shaping and giving meaning" to the professional development activities (Lave, 1993, p. 65). Increasingly technology can function to fulfill the professional's need for fact-based information; however, professional development is about becoming a reflective practitioner (Schön, 1995). CofP can aid in this development.

Within higher education, "the term 'learning community' describes a learning event with fixed time limits and existing for a more or less specific purpose" (Pedler, 1994). The design brings together peers to meet personal learning needs, primarily through a sharing of resources and skills offered by those in the community (Rigg & Trehan, 1999). Learning is a social activity where the autonomous student takes responsibility for his/her own learning (Lea, 2005). In a similar fashion, a CofP provides resources and facilitation of learning by using the time, expertise, and knowledge of a collection of individuals in a real-life, real-time context.

However, a CofP has some significantly different characteristics. First, by their nature, CofP are generally self-forming and self-governing. Second, a CofP is a "group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger et al., 2002, p. 4). Third, they can occur in any area of an individual's life. For instance, they occur in the context of organizations (Wenger et al., 2002) or formal educational settings (Wenger, 1998). A broad sweep of the literature about CofP ranges from the principles to create and maintain communities within organizations (Wenger et al., 2002), interrelatedness of learning, meaning, and identity because of engagement with a CofP (Wenger, 1998). and how discourse and language shapes CofP (Barton & Tusting, 2005). Fourth, Wenger (1998) proposes that learning, the creation of shared meaning, and identity formation occur because of engaging in CofP. Finally, learning is situated in the context in which it will be used. This is an important component of this type of social learning. Its value lies in moving learning beyond the individual through collaboration out into the world of practice.

Methodology

The purpose of this study was to assess the effectiveness of this learning strategy from the learner's point of view, in a higher education context. The following questions guided this study:

- 1. How did the learners' experiences of CofP in a graduate level class affect their learning and professional development?
- 2. How does this experience of CofP compare to other types of collaborative learning?

Educational Context

The educational context of the study is described in the next section. The sample is two graduate level courses in the Adult Learning and Development program at an urban midwestern United States university. The courses and the study were conducted between 2005 and 2008. The instructor was the principle researcher while the second author contributed, as her graduate assistant, to the data collection and initial data analysis for this study.

Human resources and organizational development for adult educators. While developing the curriculum for a course entitled "ALD 646 - Human Resources and Organizational Development (HROD) for Adult Educators," the idea of using a CofP learning strategy emerged. The literature pointed to its growing use in organizations (Wenger et al., 2002). This led the instructor to decide to introduce the students to a CofP experience.

One current challenge in HROD is to create an environment that elicits the dedication of employees to an organization that is more committed to "rightsizing" and profits than to their dedicated employees. One way for HROD to meet this challenge is to help employees become "career resilient" (Waterman, Waterman, & Collard, 1994). Under this model of career resilience, employers and employees form an adult-adult relationship. It is important to maintain a balance within this relationship. One side of the balance is the employer's need to maintain a flexible workforce to ensure organizational success. The other side is to provide employees with the tools they require to remain competitive in the workforce. One approach to maintaining this balance is a CofP. For instance, Samsung Electronics Corp. is supporting a CofP system as part of their training program. Employees can choose to join a CofP to help them acquire the skills and knowledge they want to learn (Choi, 2006).

Reflecting on the needs of the students, the instructor realized the value of the CofP experience as a tool within the classroom. She determined that it could be useful in enhancing the students' professional

development. The course focused on organizational development, training, and career development. The instructor utilized this CofP learning strategy while teaching the course on three different occasions over a three-vear period.

Adult education in a changing society. After the instructor's first use of CofP as a learning strategy in "HROD for Adult Educators," she decided to incorporate it in a more theory-based course (Monaghan, 2007). The objective was to provide the students with the opportunity within a CofP setting to create their own collective strategy to learn more about the provision of adult education in society. The overall purpose of this course per the syllabus was to provide an "overview of the field of adult education; study of the philosophies of adult education; discussion of historical development, future alternatives, and contemporary issues and trends as they affect adult education in diverse settings." In keeping with the context of this second course titled "ALD 607 - Adult Education in a Changing Society," she made some minor modifications in the original assignment. Specifically, in this course, the individual CofP needed to relate the topics directly to the provision of adult education. Utilizing this strategy, the instructor taught the course four times over a three-year period.

Learning strategy description. The primary purpose of the CofP assignment, as outlined in the syllabus, was to provide the students with the opportunity to "(a) experience the process and (b) have an opportunity to explore a topic in depth from the vantage point of an individual learner and as a member of a community." The assignment, in both courses, consisted of four parts.

For the first part of the assignment, the students developed their CofP and learning plans. Students began by exploring the expertise and knowledge of each community member as it related to the course content. Next, the CofP identified specific knowledge gaps and relevant topics to focus on during the semester. After selecting topic(s) and a supporting learning question, the CofP devised a learning plan. The tangible evidence for this part of the assignment was a paper that summarized the current knowledge of each member of the CofP, the knowledge gap they chose to explore, and the learning plan. The second part of the assignment involved inviting the instructor to one of their CofP meetings. The instructor's purpose was to observe the dynamics and interactions of each CofP and discuss with the members any developmental issues or concerns.

The third element of the assignment asked each member to write a three-to-four-page reflection paper about his or her individual CofP experience. This paper addressed the learning that occurred, the contributions of the members, and the student's plans to transfer the

knowledge to the professional sphere. Finally, the students assessed this CofP experience in light of previous group work experiences. This reflection paper was the basis for the data collection for this research.

Finally, the fourth part of the assignment, and an essential ingredient of the CofP process, was for each community to disseminate the knowledge they created. This was accomplished by giving a presentation to the larger class community. As part of the presentation, each member included a short personal reflection on the use of CofP in adult education settings.

A Qualitative Approach

Qualitative methods of collection and analysis were used because it is "the preferred strategy when 'how' or 'why' questions are posed" (Yin, 1994, p. 1). Yin (1994) also suggests this approach when the intent is to study a contemporary phenomenon within a reallife context. When looking at learning strategies, individuals vary in both their interaction and use of the strategy. While the "individual nature of learning is a fundamental tenet of experiential education, it is still important to stand back from the individual experiences in order to look at the patterns of change that cut across the specifics of person and circumstances" (Patton, 2002, p. 525).

Participants

The participants were members of graduate level classes in the Masters in Adult Learning and Development program at a midwestern urban university. The findings are based on the written reflections of 17 masters and doctoral students who agreed to be part of this study. Since the data was obtained confidentially, no demographic information was collected. However, in the program as a whole, the makeup of the students in this program is as follows: 25 % males and 75% female, 1% Hispanic, 35% African American, and 64% Caucasian. The age ranges are from 24-60, with the majority of the students in their 30s and 40s. "ALD 607 - Adult Education for a Changing Society" is a required core course in the master's curriculum while ALD 646 is an elective.

Data Collection and Analysis

With the approval of the Institutional Review Board, students were asked to volunteer to submit copies of their final paper for this research project minus identifying information. These papers were collected separately and analyzed after the end of the course. They constitute the raw data for this study. As explained earlier in this article, the final paper directed the students to assess and reflect on their experience in

a CofP during the semester. In addition, the graduate assistant's journal maintained during one of the classes is part of the data. Data was collected from both courses in which this learning strategy of CofP was a significant

The constant comparative method of analysis was used to categorize and answer the research questions (Bogdan & Biklen, 1998). The authors coded the data separately and then collaborated on the development of common categories (Bogdan & Biklen, 1998). Then categories were compared across participants to arrive at themes inductively. Additional sorting and categorization occurred to refine the themes. The criteria for including a theme were because at least half of the participants individually talked about a particular theme in their reflection papers.

Limitations

There were several limitations to this study. First, the data of the reflection papers were part of a graded assignment; therefore, it is important to recognize that the agenda of the instructor and the learning environment potentially influenced the students' reflections. In addition, the topics of the two courses were substantially different. One course focused on theory and the other one focused on the practicalities of HROD, and there is the possibility that one of the two might be better suited to using CofP as a learning strategy.

Findings

Three themes emerged to describe the experience of the students in a course using the CofP learning strategy: (a) acquisition of content knowledge, (b) interrelationship skills, and (c) a new process for lifelong learning.

Acquisition of Content Knowledge

In the CofP experience, four significant factors affected the acquisition of content knowledge: (a) synergy in learning, (b) use of experience, (c) engagement in real-life contexts, and (d) knowledge transfer.

Synergy in learning. Many respondents agreed that an advantage of the CofP experience was the rapid and comprehensive accumulation of knowledge about their areas of interest. The CofP became a synergistic means to acquire knowledge. One participant noted, "This process's advantages are that you are able to gather a lot of information quickly compared to if you were working by yourself, or in a group." A sense of collective motivation also contributed to the synergy, as captured by this comment: "The main advantage is

when you get a group of people together who have the same interest. This will increase the motivation of the group to learn more and rely on each other to increase the community's knowledge base." The intentionality of the acquisition of learning also created "synergy between willing participants." Finally, the emphasis of a CofP on leveraging an individual's strengths and expertise created a structure where "Project tasks were distributed in such a way that responsibilities were assigned to each member based on individual strengths and weaknesses. This synergistic aspect of the CofP made the experience richer and more beneficial for me as a member."

Experience. The use of a student's experience was valuable to the acquisition of knowledge because it informed his/her interests and the way they participated in the CofP. As a result, many participants expressed "A new confidence that prior experience and knowledge was an asset to the community....Everyone came in with some level of knowledge...so prior knowledge was beneficial to the community." The result was that "Through discussion about the topics, and our prior experiences, we were able to 'refine' our ideas and 'discard' the ones that were out of line with our thinking."

Real-life context. Participants were able to include their knowledge and experiences and translate them to real-life contexts. This transfer furthered their understanding of past, current and anticipated experiences in their professional lives. Because the CofP engaged the learners at the levels of their experience, it was learning that was "more pertinent to real life circumstances." In addition, a participant noted that the CofP was important as a space "to share life experiences, information, and research especially the opportunity to include life experiences."

However, the use of CofP as a learning strategy had some artificial elements to it. The majority of the participants felt time constraints in a higher education graduate course were an important artificial constraint. Both those who experienced the CofP in the short sixweek format and those who took a semester length course of 15 weeks felt there was not enough time for the experience. One participant maintained that time limitations "forced quick membership and formation because the need to be part of a CofP." Another stated, "The ability to extracting a greater amount of knowledge from each member of the community, based on their expertise, would very likely have intensified my learning experience. Nevertheless, this issue has more to do with an abbreviated time frame rather than the actual design of the community."

Overall, the participants found the CofP to be useful, in spite of the time constraints. One commented, "While I felt that the limited amount of time we had in which to practice as a community impeded the process,

I was able to get a flavor for the dimensions, and dynamics involved with this opportunity and view it as a microcosm of a more prolonged experience." Another participant felt, "The compressed nature of the class really cut down the time we would have had to make a true community come to maturity. We did need to force things to happen more quickly than I would have liked since it was part of a class. I did enjoy the experience, but just when it started it seemed like it was done."

Transfer of learning. One objective of this learning strategy was to help learners transfer the learning to their professional lives. An important indication was the desire of students to use what they learned outside of the classroom. One participant expressed this ability to transfer knowledge beyond the classroom as a "diversity of experience [which] created a potential pool of practical knowledge that extended through the community and beyond. In addition, because there is no real end point, the community and learning can extend beyond the limits of the classroom." The graduate assistant noted in her journal, "It's interesting how I set out to learn more about CofP and alternative learning, but also learned about myself, my comfort zones, and my discomfort zones! I also built my confidence and look forward to implementing CofP in varying situations and capacities!"

A majority of the participants agreed that they would like to be involved in CofP in the future. One expressed this desire as "a nice tool for the toolbox for my future endeavors." Some students even began CofP of their own. As one participant disclosed, "As a result of this class and engaging in this experience, I and a group of students from my doctoral class have decided to form a CofP for our comps and dissertation process." Another felt, "I would definitely participate in a community of practice in the future. I think the hard part, at this point in my life, would be finding one [and finding the time] to fully engage in one."

The CofP learning strategy allowed the members to gather information quickly, use each member's strengths, knowledge, capabilities and experiences, increased motivation based on a common interest, and base the learning in real world experiences. One participant captured the entire cycle from knowledge acquisition to transfer observing,

The cycle of learning is that information is collected from individuals and returned to the whole community where it is used to generate more ideas....It is an ongoing transfer of knowledge which creates an efficient way for members to keep up with new trends in different areas of the field....The information gathering is fluid and open-ended and provided knowledge that I would not have gained otherwise.

Interrelationship Skills

Careers and professional development depend on employees abilities to engage in constructive relationships. Networking and the ability to deal with conflict appeared as two important components of relationship skills related to the CofP learning strategy.

Networking. The CofP strategy provided space for students to create new connections, reignite old contacts and in one case resulted in a new consulting assignment. In terms of networking among learners, the participants felt the CofP was "Beneficial not only for class purposes but also for further career exploration....a great networking opportunity...it helped to underscore and strengthen the value of networking – not just in the present but in the future as well..." Another participant articulated, "It fosters the opportunity for learners to cultivate relationships." Participants also commented on the CofPs helpfulness in getting to know other learners at a deeper level: "I found it to be an enormously valuable tool because it provided an opportunity to really get to know your classmates." Many of the participants noted that one of the best benefits of CofP was the relationships that developed among the community members allowing them to gain the perspective of others and establish professional relationships with their classmates. As one participant pointed out, "Through my community of practice I have established a solid professional connection with each member. Members of this group feel that they could contact each other professionally at any time and it is my hope that we do." Most importantly, we found that the networking extended beyond the classroom and CofP. One participant explained, "In addition, my interviews and knowledge gathering allowed me to network with fellow doctoral candidates and reconnect with colleagues. One interview even resulted in a new job assignment for my business."

Conflicts. The ability to deal with conflict and develop consensus is important to career success. Students felt that conflict was a part of the CofP experience. Some students used the conflict in a positive manner to apply previously acquired learning and tools to transform the situation. The graduate assistant wrote the following in her journal:

One member sent out an e-mail regarding a decision about restricting our group membership (which I and another CofP member had not condoned) and copied the professor. I was under the impression that CofPs were fluid and allowed the ebb and flow of members as needed. The situation had escalated to a conflict that I then chose to actively address with that CofP member and the other parties upset by the chain of events. I

was able to utilize what I had learned in my earlier elective class, Conflict Management, to plan for and handle the challenging situation with one classmate and friend. Besides building my confidence with conflict management. I also learned the importance of letting others take responsibility for their own actions.

This particular experience did incite some anxiety and frustration, however. She felt this conflict initially lead to temporary disengagement from other classes and a potentially damaged personal relationship.

Most participants saw conflict as a hindrance to the learning, with one pointing out "...conflict amongst us only helped disrupt our ability to function as a source of knowledge, and may have hindered the learning process for those group members that by nature avoid conflict." Conflict in some cases resulted in disengagement from the CofP. One participant revealed, "The knowledge that I brought to this community of practice is implicit knowledge of communication barriers. I was not able to distribute information discuss, or communication barriers within my community. The community of practice that I am currently involved in has been operating independently." The student felt invisible, if not ignored within the community. What is ironic about this situation was that the topic of the CofP was "Communication in the Workplace."

In contrast, some CofP experienced very little conflict and felt that their community worked well. One participant explained in the reflection paper,

The community experienced very little conflict and the conflict that was experienced was resolved quickly and positively. The CofP was successful in quickly establishing rapport. Members were interested and supportive as we took turns sharing our professional journey with each other during our first meeting.

Another participant identified trust as the key in dealing with conflict: "A certain level of trust is necessary for the open exchange of ideas."

Some students perhaps are better prepared to handle conflict in the midst of engaging in a new learning strategy. Others, however, may need more tools. Nevertheless, a number of participants felt that conflict affected their ability to engage in this learning strategy. One reason for this conflict may be the artificial nature of CofP in general and the limited amount of time for students to get to know one another before becoming part of a CofP. Unlike a CofP in a real-life context, the process of group formation affected the relationships and resulting conflict in a substantial manner. In most instances, the integration of new members, after the initial meeting created conflicts

and challenges to the CofP: "A fourth member joined the community only after a conclusion was reached as to an area of inquiry. In the interest of time, [the CofP] went forward with the established topic." A second participant noted, "An example of such a [conflict] scenario became evident in our community when the group member that joined the community late, because all the other communities were already established and running, seemed to be at odds with the direction the group was taking, resulting in one conflict after the other between her and the group."

However, one element that seemed to moderate the conflict was the ability of the CofP to discover their common passion about a topic. One participant had this comment: "I have discovered that all members must embrace an equal amount [of] passion for a topic during the critical formation of the community in order to benefit fully from participation."

Overall, the participants in the study agreed that a common passion for a topic could enhance and sustain relationships when members dealt with conflict, and that networking was a beneficial outcome of using this learning strategy.

A New Process of Lifelong Learning

CofP foster two significant ways of engaging with lifelong learning: self-directedness and collaboration. Usually these two ways of learning are viewed as opposite ends of the spectrum. However, in CofP, the combination allows for greater learning to take place.

Self-directed learning. Most participants were surprised at the amount of self-directed learning that is required for a CofP. One participant expressed it in these terms: "Our society prefers clear boundaries with goals, and it may be challenging for people (as was the case for our CofP) to negotiate the uncertainty and realize the full benefits." Another felt that the lack of structure and resulting ambiguity of a CofP was a disadvantage. A participant explained,

...I found I am one that does better with structure and deadlines. The other disadvantage is because not everyone in the community had ever experience[d] anything like this it was difficult to know exactly what to do (at first). This assignment felt very free and I like structure. I am an organized person and being in a community of practice feels like everything is up in the air.

They were further surprised that once they got past the initial anxiety of this new form of learning that they actually enjoyed it. They felt they learned more than they would have in another setting. Many of the anxieties and resistance to the self-directed nature of the CofP can be attributed to the nature of higher education classes, where grades are an important part of any course. A participant complained, "Also, some students are only 'C' students, whereas others are 'A' students. When you combine these two types of students, stress is created. The 'C' students feel like they do not have to participate within the community and leave all the work to the 'A' students." We live in a society that talks about teamwork and community, but it rewards members in all spheres, including higher education, on an individual basis. This presented challenges to the learners as they struggled to stay with a process that had an individual grade attached.

Collaboration. Collaboration was an aspect of the CofP learning strategy that the participants valued. The previous discussion about the synergy created in the learning context is one example of this. It illustrates how collaboration operated within the framework of this learning process. Many participants directly spoke about the value of collaboration: "My experience with CofP has caused me to look for ways to leverage my skills by combining them with others who share the same vision, but bring a different perspective." Another pointed out, "Each of us took turns committing to a certain responsibility."

The graduate assistant posed questions regarding obstacles that may prevent effective collaboration in a CofP: "Could prior experience in group work or project teams actually create some difficulties for those with that particular background to transition into engaging in a CofP and carrying out collaborative inquiry? In addition, would bad experiences in the past also create barriers to true collaboration and heighten anxiety?"

Comparison to Other Forms of Collaborative Learning

The second research question asked how this CofP experience compared to other types of collaborative learning. Since the use of group work is an important learning strategy for the Masters in Adult Learning and Development program, most of the comments from the participants compared their CofP experience to group work. In addition, many students work with groups or teams in their professional environments. Therefore, in comparing CofP to other group work in a higher education setting, the participants viewed it as both similar to and different from group projects. We think that the differences contributed to the themes that emerged in the previous discussion about the first research question.

Different from group work. In discussing how group work and a CofP was different a participant shared that it "created more opportunities [than group work] for educating and learning....We were able to generate more knowledge as a community than as an individual, in terms of both diversity and breadth." A second participant noted that "I experienced more

interactions and dialog than is usually found in my previous group work experience." Finally, a third participant said, "the difference between the CofP and group work is that there are a lot more opportunities for people to learn from one another..."

Some participants understood the synergy from belonging to a CofP. One participant pointed out, "In CofP, you do split the work up, but you come back together and discuss the information you find, leaving no gaps in what one person takes away from the experience."

Similarities to group work. Some participants felt that the structure of the assignments created a feeling of group work. One participant reflected, "I believe that a community of practice is extremely similar to a group or team project. Within an educational setting, there are assignments that need to be completed." Another participant remarked, "Within a community of practice, there are some similarities to group projects: deadlines, sharing information, common goals, and an unofficial leader to mention a few." Still another felt that "As our CofP was forming our decisions and activities seemed to reflect a common desire to complete a project rather than gather knowledge." Finally, one participant observed, "After we agreed on norms, we moved into action planning mode, which is very representative of group work. We also set timelines and actions for upcoming assignments. We then talked about our objectives..."

Conclusion

The data from this study reveals the inherent value of the use of the CofP assignment as a learning strategy. It also reveals some limitations in the nature of a graded assignment given the competitive nature of higher education. It is crucial that higher education, in all disciplines and programs, offer students opportunities to develop their professional development skills. There are many benefits to utilizing a CofP learning strategy to achieve that end.

Three conclusions can be drawn about the use of CofP as a learning strategy in higher education classrooms. First, CofP provide a means to promote self-directed learning and collaboration simultaneously. The study reveals that CofP are important learning tools because they allow learners to contribute their experiences and knowledge in significant ways to cocreate knowledge. They align with learners needs to be self-directed. Even learners who initially lacked confidence in their abilities to be self-directed experienced an increase in their capacity for selfdirection. Finally, the relational or networking aspect of CofP is stronger than in other types of collaborative learning, providing learners with associations that can

be useful for lifelong learning that takes place well beyond the end of the semester.

A second conclusion is that this learning strategy fosters the ability of students to learn about real-life contexts while encouraging them to transfer learning to a professional environment. Third, CofP model for students a type of professional development increasingly used in many organizations as an alternative learning model for creation of knowledge (Choi, 2006). Current CofP research is demonstrating the effectiveness of this alternative model to the individual and the organization (Zboralski, Salomo, & Gemuenden, 2006). Based on the theme of Interpersonal Skills focusing on networking and conflict, further research regarding the role of personality styles or team preferences guiding the success of a CofP could yield some interesting answers, as well as more questions. For instance, Belbin (1996) and DiSC instruments (Marston, King, & Marston, 1931) administered at the formation of a CofP may provide insight for each member about themselves and other, as well as help members promote positive, transformative conflict management.

Some important challenges need to be considered when using this learning strategy. First, the selection of who joined the CofP presented raised issues and conflicts. While it is important that students try to develop a CofP that involves common interests, it is also important to promote diversity across the membership. As a society, we tend to affiliate with those who are most like ourselves. However, one of the goals of higher education is to help students broaden their exposure to many types of people and experiences. One way to accomplish this is to discuss the importance and benefits of having a truly diverse CofP in relation to experience, knowledge, race, ethnicity, age, gender, sexual orientation, work style, personality, etc. A second aspect would be to include the following criteria for CofP membership: (a) shared interest in the topic and (b) diversity in membership. The hopes are that the superficial differences and power struggles will be equalized by embracing a diverse participant base in a CofP structure. However, scholars are challenging "this model of social learning as a method that gives power to the learner where societal inequalities disappear or are at the very least inconsequential for learning" (Monaghan, 2007, p. 15).

Another challenge is the integration of a new member after the initial meeting of the CofP. Our experience has been that the situation generally ends in the CofP engaging in more than the usual amount of conflict over the course of the semester. While conflict cannot be avoided, it can be minimized. One way to do that would be to assign the student to be on the periphery of multiple CofP and then engage in facilitating a session that brings together the common strands for the larger community.

A third challenge is the artificial nature of CofP as a learning strategy. Students may feel as though they are forcing a common interest, topic, or membership. In this instance, the instructor can acknowledge that it is artificial in some respects stating that the purpose is to provide the students with an approximate experience where they can learn to be more self-directed and collaborative.

The use of CofP as a learning strategy can be incorporated across a wide range of curricular content, from business courses to history courses, to name a few. In this study, the learning strategy was used in both a practical skills course and in a theory-based course with successful results. The context of the courses in this study occurred at the graduate level in an adult education program; however, this strategy is appropriate for a variety of courses at diverse types of institutions. The CofP learning strategy is applicable to different course content, class levels, experiences, and interests of the students. It provides space for students to learn the skills of self-directed learning in a collaborative environment and enhance professional development abilities. Finally, this strategy can enhance the transfer of knowledge from the classroom to a real-life context, which is an important aspect of professional development.

What does the use of the CofP model as a learning strategy mean for professional development and lifelong learning for higher education students? It provides learners with the opportunity to learn how to create and utilize CofP. CofP support the objective of helping students to acquire the collaborative, self-directed learning skills that are part of the arsenal for maintaining career and professional development.

In summary, CofP as a learning strategy in a higher education setting provides an opportunity for learners to explore a process to help them create and sustain both their career and personal lives. This type of classroom activity provides a forum for self-directed learning on a community level and helps learners to establish networks that are important for future life success. Of greatest importance, it can help them link their education to their career and their careers to engagement in professional development and lifelong learning.

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CATHERINE H. MONAGHAN is an Assistant Professor in the Master of Adult Learning and Development program at Cleveland State University in Ohio, USA. Her research interests include Communities of Practice, Critical Management Studies, graduate education and the scholarship of teaching. Correspondence may be sent to email address c.monaghan@csuohio.edu

NORINA L. COLUMBARO is a doctoral student in Urban Education, Leadership and Life-long Learning at Cleveland State University. Her consulting practice, Performance for Life, has provided clients with coaching, training and development as well as technical communication support since 1999. She may be reached at perform4life@earthlink.net