

# From the Classroom Learning Community to a Web-Enabled Community of Practice

**James M. Greer**

Under the guidance and direction of an involved facilitator, a classroom learning community is able to transform into a viable community of practice empowered by the intrinsic social networking capabilities of Web-enabled applications. This evolutionary step is made possible by an engaged mentor or group-nominated peer who has a continuing concern and interest about the direc-

tion of a particular practice or profession. Within both traditional and distance education classrooms Web-enabled applications and technologies have greatly assisted in the facilitation of these communities. Garrison, Anderson, and Archer (2003) stated, "This new transactional era of distance education has been largely shaped by the ability of computer mediated communication (CMC) to create a community of learners at a distance" (p.114). To clarify this progression it is important to define a community of learning, define a community of practice, discuss the sources of a community of practice, list Web-enabled applications that may be used in communities of practice, recognize the characteristics of a community of practice, and discuss the importance of facilitation.



James M. Greer, Senior Analyst, Courseware Developer, and Instructor, L3COM, Air Operations Center Formal Training Unit, Hurlburt Field, Florida.  
Telephone: 850-217-9347.  
E-mail: jgreer01@gmail.com

## **DEFINITIONS**

One definition of a learning community proposed by the organization Tele Apprentissage Communautaire au Transformatit (1998) notes that it is "a group of students and at least one educator who, for a while and motivated by common vision and will, are engaged in the pursuit of acquiring knowledge, abilities and attitudes" (para. 1). This community of learning may exist in both traditional and

distance venues with interaction varying from almost nil to very involved, depending upon the design and structure of the course. In describing a well designed online community of learning Tu (2004) noted, "Teammates communicating with each other, learning together, searching for resources, supporting each other, conducting team projects online, and solving real-life problems have become important activities in the learning process" (p. 4).

Communities of practice are defined by Wenger (2002) as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise by interacting on an ongoing basis" (p. 225). For example, the community of practice may be able to provide peer techniques, tactics, procedures, or solutions for a given problem. Tu (2004) found that, "Communities of practice (CoPs) are groups of people who share similar goals, interests, and practices and, in doing so, employ common practices, work with the same tools, and express themselves in a common language" (p. 17).

A classroom community of learning appears to have a single-minded goal which is the search or quest for knowledge. A community of practice may be viewed as sharing similar goals, but those goals may differ between members, and those goals may be achieved outside the context of a traditional or virtual classroom environment.

## **SOURCE OF A COMMUNITY OF PRACTICE**

A community of practice may have its origin in the traditional or virtual classroom. In the classroom environment students socially interact with each other within a community of learning for a substantial period of time over the course of a semester or even longer. Abels (2005) noted, "The classroom, in a sense, is the workplace for many of the students, and as Bennis and Slater (1969) point out, the

workplace becomes a temporary society" (p. 145). After graduation, this workplace ethic and mindset is transported into the actual working environment. The close relationship between current activity theory and a community of practice is noted by Polin (2004).

Building on seminal work by the Russian psychologist Vygotsky (1978), current activity theory is one model that describes learning as the consequence of interaction with people, objects, and culture, in goal-oriented, organized, collective effort (Engestrom, 1999). The "community of practice" concept is a closely related model that describes learning as a consequence of organized, goal-directed, social activity (Lave & Wenger, 1991). For both models, in a healthy system, the individual learns through a process of enculturation into a slowly but constantly evolving practice. (p. 18)

There is a perceptible change that occurs as a learning community transitions from a classroom environment to the workplace where a community of practice has the opportunity to thrive in a transformed type of learning environment. In a traditional classroom setting, students and their associated community of learning are geographically co-located. When students become geographically separated upon graduation the opportunity to participate in a larger community of practice becomes possible. Drawing a parallel to the non-traditional virtual classroom, students and their associated online community of learning are virtually colocated. When students become virtually separated upon graduation, the opportunity to participate in a larger community of practice also becomes possible.

Included in this realm of resistance are traditional institutions, professors, teachers, and instructors that are satisfied with the results of staying with the eighteenth century chalkboard and teacher-centered methodologies. They may not be aware of

the possibilities of using technologies for the purposes of a community of learning or of practice, but once the free-flow exchange of ideas begin to take place, the outcomes could possibly sway some long-standing negative opinions.

Educators working in corporate, health, military, or other career organizations should be cognizant of the exact point at which an opportunity reveals itself to facilitate a learning community into a community of practice. This opportunity takes advantage of newfound incentives within the community of practice for the individual. Addressing the motivation for more uninhibited participant involvement within a community of practice versus a more restrictive classroom community of learning, Kreijns, Kirschner, and Jochems (2003) stated, "This is because nontask contexts are usually characterized by informal and casual conversations often initiated by impromptu encounters which deal with a broad range of (task and nontask) subjects allowing serendipitous opportunities for getting acquainted" (p. 344). Now that students are away from the pressure of a classroom environment course graduates may now become part of the less threatening nontask environment. It is incumbent upon educators to exploit and facilitate these opportunities to establish communities of practice in order to advance a practice or profession.

### **ENABLING TECHNOLOGIES FOR COMMUNITIES OF PRACTICE**

Communities of practice that evolve from a traditional or virtual classroom may be supported by web-enabled technologies and applications to facilitate engaging and robust communities of practice. A community of practice may be organized and divided into structured areas of concern using selected online applications that are effective in their use. They may be updated frequently utilizing e-mail lists, wikis, discussion threads, webinars, web portals or

conference calls in preparation for possible face-to-face meetings or conferences. A model for using these online technologies and applications in preparation for an annual conference is utilized by organizations such as the United States Distance Learning Association (USDLA) or the Association for Educational Communications and Technology (AECT).

Due to the increased availability and accessibility of web-enabled applications, it has become easier and more economical to initiate informal learning among groups who may not necessarily be members of well-established professions. The World Wide Web makes it easier for like-minded individuals to form a new community of practice that originates from a classroom learning environment. Potential communities are waiting to be established in not only in the education, corporate, military, or health fields, but also in vocational and technical fields of practice. These individuals seek to share and build upon practical workplace knowledge within their community by providing such items as a library of lessons-learned, advice, or mentorship that may enhance their community of practice as a whole. Kiekel and Cooke (2005) note the impact of web-enabled applications.

In particular, computer-mediated communication and decision-making applications for teams are extremely varied and ubiquitous, ranging from e-mail to shared bulletin boards for classrooms to remote conferencing. As the potential to put these applications onto the Web becomes better exploited, computer-mediated communication and coordination of teams of individuals will become even more widespread. (p. 100)

As an example, the National Weather Service's Cooperative Program for Operational Meteorology, Education and Training (COMET) discovered enabling technologies during development of a training program that greatly assisted in

establishing a community of practice for Science Operations Officers (SOOs) (Johnson, 2000). After in-residence training, the SOOs are geographically separated to hundreds of different locations. To enhance communications between the SOOs, an online Training Resource Center (TRC) was developed, containing training materials and other useful information. In describing the TRC, Johnson (2000) noted, "Finally, we also believe that the TRC can foster a greater sense of community in which the SOOs share ideas and the more experienced members mentor newer members" (p. 24). A Web-enabled application called the forum page proved useful in maintaining the community of practice for SOOs. Johnson (2000) described, "The Forum page is intended as a place for holding discussions that we feel are key to building a community of practice among the SOOs" (p. 24). As displayed in the COMET example, trainers were able to recognize an opportunity to establish a community of practice for what originally started in a traditional classroom community of learning. After graduation, the graduates were included in a web-enabled, facilitated community of practice that holds multiple discussion threads on various topics (Johnson, 2000).

Web portals are also useful for the facilitation of a community of practice, as Golbeck, Alford, Alford, and Hendler (2005) note: "portals in the traditional sense are domain-specific pages that do not necessarily have a search feature. The goal is to provide users with a centralized place to find links, newsgroups, and resources on a topic" (p. 177). While web portals are used by many different professions, the Department of Defense (DOD) hosts communities of practice for its diverse service components. The limited access portals are the Army Knowledge Online, Defense Knowledge Online, Defense Online Portal, MarineNet Portal, Navy Enterprise Portal, and the Air Force Portal.

The Air Force Portal is accessed through the "Air Force Knowledge Now" website. It is restricted to personnel who have access to the .mil domain and a coded access card verified by a card reader. "The Air Force Knowledge Now communities of practice are the official collaboration tool of the Air Force" (AF Portal, n.d.). There are several options regarding joining an Air Force community of practice. An individual may browse through the categories to determine which practice to join. Once a decision is made by a person on which community of practice to join, he or she may join an open community that may require a second user login. A person desiring membership may be required to fill out an application to determine whether or not membership to that community is beneficial to all parties. Membership criteria are determined by the hosting community of practice (AF Portal, n.d.).

## **CHARACTERISTICS OF A COMMUNITY OF PRACTICE**

The individual comes into a community of practice through what could be conceptually considered as two membership phases. The first membership phase is as part of the classroom learning community, where self-survival and self concerns may take precedence over group concerns in order to graduate from a course with a passing grade. A transition is made during the second membership phase, which involves joining the more diverse community of practice as Mayes (2002) noted, "The individual now becomes defined more by a group or community and their motivation to learn is now derived from the need to carry out the activities of the group. Almost by definition, they are given a reason to learn" (p. 169). The member now has the characteristic of being defined by the group. The second membership phase community of practice supersedes the first membership phase classroom community of learning.

Trying to coerce an individual to join a community of practice against their will may not necessarily work. Snyder, Wenger, and De Sousa Briggs (2003) stated, "A crucial characteristic of a community of practice is voluntary participation, because without this a member is less likely to seek or share knowledge; build trust and reciprocity with others; or apply the community's knowledge in practice" (p. 20). Simply assigning a person to a community of practice does not necessarily mean that a successful learning relationship will be automatically achieved. Invoking a volunteer and sharing type of attitude among members of the group would be an important goal of the facilitators, mentors, and group members themselves.

In setting up or designing a community of practice, one of the desired characteristics is to have an effective and engaging group of members who collaborate with each other by participating in an ongoing communications process. A community of practice design that is considerate in achieving this characteristic is noted by Snyder et al. (2003):

A community's effectiveness depends on the strength of its three core structural dimensions: its domain, community, and practice. "Domain" refers to its focal issues and the sense of members' identity with the topic. "Community" includes its member relationships and the nature of their interactions—levels of trust, belonging, and reciprocity. "Practice" consists of a repertoire of tools, methods, and skills—as well as members' learning and innovation activities. (p. 17)

Understanding Snyder's et al. (2003) mechanism assists in establishing the critical elements of the domain, community, or practice. Once identified for a given community of practice those elements are readily identifiable with associated key characteristics. These key characteristics could then be addressed in the event any of the dimensions might be deficient.

Another characteristic of a community of practice is the individual's collaborative relationship with other members of the community. Mayes (2002) reiterates Snyder's et al. (2003) recognition of the community member's important relationship with the group. "With the concept of a community of practice comes an emphasis on the individual's relationship with a group of people rather than the relationship of an activity itself to the wider practice, even though it is the practice itself that identifies the community" (Mayes, 2002, p. 169). Although the practice itself is the main concern of the individual within the community of practice, Mayes (2002) made clear that the individual is still more closely attuned to the relationships within the group rather than with the main activity.

Not only must the individual become cognizant of operating within a group community model, but in doing so will also progress to the next level of learning and knowledge building. As Gonczi (2004) stated,

Learners must develop generic capabilities and dispositions (including the capacity for ongoing learning as the nature of their professional practice evolves and expands) that will enable them to deal with a range of complex situations, and to do so in ways congruent with a set of moral principles. These capabilities are best developed through the knowledge building undertaken during work in a community of practice. (p. 33)

The community of practice is a vehicle by which an individual may continue the lifelong journey of learning. Wisher (2004) noted, "Also, communities of practice naturally arise at the workplace and within one's profession, both sources of lifelong learning" (p. 188). It could be said that members within a community of practice are most likely to be lifelong learners.

## **FACILITATION OF A COMMUNITY OF PRACTICE**

A critical component in achieving an ongoing, successful, and viable community of practice is a dedicated facilitator or set of facilitators. As stated before, it could be a mentor or group-nominated peer who may be the most capable principal to guide this community of practice and inquiry. In discussing communities of practice that utilize the online environment, Gunawardena (2004) stated, "It is the ability to facilitate critical communities of inquiry that I think is the single most important contribution of this medium to distance learning" (p. 145).

A facilitator should be proactive in attempts to communicate with community of practice members. Items to address by the facilitator could be the latest updates regarding current events or issues, possible webinars, and the maintenance of an accurate e-mail roster list of active members. In turn, the facilitator may use the community of practice as a resource for its members to assist in conducting research. The facilitator could assist in establishing experimental and control groups, provide samples of convenience, presenting surveys, and establishing formative and summative committees in the pursuit of furthering the activities of the community of practice. The facilitator should constantly steer the group towards professional journals, articles by fellow members, most recent guidance, and noted trends from recognized experts in the field or profession.

A successful community of practice must be designed to serve the precise needs of its cohort members by implementing suitable facilitation in order to keep the dialogue and exchange of information and ideas flowing in a learning environment.

## **CONCLUSION**

To clarify the progression from a community of learning into a community of practice it is important to define a community of learning, define a community of practice, discuss the sources of a community of practice, list Web-enabled applications that may be used in communities of practice, recognize the characteristics of a community of practice, and discuss the importance of facilitation. In establishing the learning process within a community of practice Gunawardena (2004) stated, "Lave (1991) considers learning not as a process of socially shared cognition that results in the end in the internalization of knowledge by individuals, but as a process of becoming a member of a sustained community of practice" (p. 145). The desired end result is to provide an accommodating framework and set of conditions to promote learning. Ruopp (1993) noted, "A supportive community of practice can help to sustain the slow, stepwise process of 'shifting' that eventually leads to a fundamental transformation in teaching philosophy and practice" (p. 143). A community of practice can be identified through its origin in the community of learning that exists in both the traditional or nontraditional classroom. Educators and mentors are a critical link in this facilitation process through recognition of potential communities of practice that are ready take the next step forward in the learning process. A need for proper and adequate facilitation is necessary to maintain a viable Web-enabled community of practice through working, learning, and innovating.

## **REFERENCES**

- Air Force Portal (n.d.). *Frequently asked questions; Communities of practice FAQs*. Retrieved December 1, 2008, from <https://www.my.af.mil/afp/netstorage/faq/cop.html>
- Abels, P. (Ed.). (2005). *Distance education in social work: Planning, teaching, and learning*. New York: Springer.

- Anderson, T. (2003). Modes of interaction in distance education: Recent developments and research questions. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of distance education* (pp. 129-144). Mahwah, NJ: Erlbaum.
- Garrison, D. R., Anderson, T., & Archer, W. (2003). A theory of critical inquiry in online distance education. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of distance education* (pp. 113-125). Mahwah, NJ: Erlbaum.
- Golbeck, J., Alford, A., Alford, R., & Hendler, J. (2005). Organization and structure of information using semantic web technologies. In R. W. Proctor & K. L. Vu (Eds.), *Handbook of human factors in web design* (pp. 176-189). Mahwah, NJ: Erlbaum.
- Gonczy, A. (2004). The new professional and vocational education. In G. Foley (Ed.), *Dimensions of adult learning: Adult education and training in a global era* (pp. 19-34). Crows Nest, New South Wales, Australia: Allen & Unwin.
- Gunawardena, C. N. (2004). The challenge of designing inquiry-based online learning environments: Theory into practice. In T. M. Duffy & J. R. Kirkley (Eds.), *Learner-centered theory and practice in distance education: Cases from higher education* (pp. 143-156). Mahwah, NJ: Erlbaum.
- Johnson, V. C. (2000). Using technology to train weather forecasters. *T H E Journal (Technological Horizons in Education)*, 27(11), 24.
- Kiekel, P. A., & Cooke, N. J. (2005). Human factors aspects of team cognition. In R. W. Proctor & K. L. Vu (Eds.), *Handbook of human factors in web design* (pp. 90-100). Mahwah, NJ: Erlbaum.
- Kreijns, K., Kirschner, P., & Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: A review of the research. *Computers in Human Behavior* 19, 335-353.
- Mayes, T. (2002). The technology of learning in a social world. In R. Harrison, F. Reeve, A. Hanson, & J. Clarke (Eds.), *Supporting lifelong learning* (Vol. 1, pp. 163-175). London: RoutledgeFalmer.
- Polin, L. (2004). Learning in dialogue with a practicing community. In T. M. Duffy & J. R. Kirkley (Eds.), *Learner-centered theory and practice in distance education: Cases from higher education* (pp. 17-46). Mahwah, NJ: Erlbaum.
- Ruopp, R. (1993). *Labnet—Toward a community of practice*. Hillsdale, NJ: Erlbaum.
- Simpson, O. (2003). *Student retention in online, open, and distance learning*. London: Kogan Page.
- Snyder, W. M., Wenger, E., & De Sousa Briggs, X. (2003). Communities of practice in government: Leveraging knowledge for performance. *The Public Manager*, 32(4), 17-34.
- Tele Apprentissage Communautaire au Transformatit (1998). *Learning community, a definition*. Retrieved November 15, 2008, from <http://www.tact.fse.ulaval.ca/fr/html/prj-7.1/community2.html#debut>
- Tu, C. (2004). *Online collaborative learning communities: twenty-one designs to building an online collaborative learning community*. Westport, CT: Libraries Unlimited.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- Wisher, R. A. (2004). Learning in the knowledge age: Up-front or at a distance. In T. M. Duffy & J. R. Kirkley (Eds.), *Learner-centered theory and practice in distance education: Cases from higher education* (pp. 183-196). Mahwah, NJ: Erlbaum.

"ONE DEFINITION OF A LEARNING COMMUNITY ... IS A GROUP OF STUDENTS AND AT LEAST ONE EDUCATOR WHO, FOR A WHILE AND MOTIVATED BY COMMON VISION AND WILL, ARE ENGAGED IN THE PURSUIT OF ACQUIRING KNOWLEDGE, ABILITIES, AND ATTITUDES."

## Increase Your Enrollments! Offer Online Degree Programs By Spring '09!

### Learning House is Your Online Education Partner.



#### Services:

Online Campus Development  
Course Publishing  
Learning Mgt System Hosting  
Online Program Marketing

24/7 Technology Support  
Faculty and Staff Training  
Online Faculty Sourcing  
Online Education Consulting

To learn more about our services, visit us on the Web at:  
[www.learninghouse.com](http://www.learninghouse.com)



**eLearnPortal**.com

**eLearnPortal brings online colleges and nontraditional  
students together!**

**eLearnPortal is a:**

- Directory for high-quality online degree programs
- Web promotional tool for colleges and universities offering online education
- Virtual resource for adult learners seeking accredited online degrees

To view our client directory, visit us on the Web at:  
[www.elearnportal.com](http://www.elearnportal.com)

