

Professional Learning Communities and Communities of Practice: A Comparison of Models, Literature Review

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Due to the growing interest of school leaders in implementing learning communities as a way to build capacity for and sustain change, a better understanding of how the concepts of professional learning communities (PLCs) and communities of practice (CoPs) are related will aid educators in their quest to implement these concepts. This paper compares models of PLCs and CoPs and explores knowledge development and sharing within both concepts. Implications for both scholars and HRD practitioners are included.

Keywords: Learning communities, Communities of Practice, School Systems

As school systems struggle to meet the mandates of federal legislation to increase student achievement, school leaders are exploring ways to build capacity for change and to sustain improvement efforts. Since the early 1990's, there have been many concepts discussed in the literature that may help schools succeed in this endeavor. More recently, the concepts of professional learning communities (PLCs) and communities of practice (CoPs) have received increased attention from school leaders looking for ways to foster school improvement; however there has been a lack of clarity among administrators as to how these concepts are defined and operationalized (Voulalas & Sharpe, 2005). If schools intend to become more effective, changes must be implemented and sustained, and that demands that administrators and HRD professionals in schools find ways for teachers to establish collegial relationships, share knowledge and collaborate (Drago-Severson & Pinto, 2006).

Problem Statement

For the past decade, much has been written in education about the creation of professional learning communities as a vehicle for establishing collegial relationships and for building capacity for change within a school (Dufour & Eaker, 1998; Fullen, 2004; Hord, 2004; Senge, 2000). These scholars each posit that professional learning communities are a way for schools to reduce isolation and learn together to create sustainable change. While some schools have had measurable success in working toward this vision (Hord, 2004; Dufour & Eaker 1998; Morrissey, 2000; Murphy & Lick, 2004), some schools across North America as well as in other parts of the world have found the vision difficult to realize because of conditions existing both internally and externally related to culture, organizational structure and leadership (Caldwell & Johnston, 2001; Scribner, Cockerell, Cockerell & Valentine, 1999; Silins, Zarins & Mulford, 2002; Supovitz, 2002). As professional learning communities and communities of practice continue to be explored as ways to build capacity in schools to impact student achievement, it becomes increasingly important to understand the similarities and differences between PLCs and CoPs—as these two concepts seem to hone in on two separate, but critically related, foci of learning and action (Revans, 1977). As Chindgren and Wiswell (2006) point out, “both scholars and practitioners have used different labels to describe the same phenomena...and refer to different typologies” (pg. 1). Understanding the similarities between these models can help HRD professionals and school leaders see beyond the “fad” of any one model to the insights and learning that hold great potential for sustained learning communities in schools. And, understanding the differences between the models more deeply will help these same professionals make more informed decisions as to what aspects they should and should not incorporate into their customized set of interventions. It is this deeper, and more nuanced, understanding that will best enable HRD professionals working in the school system to facilitate and support the type of learning and sharing necessary for organizational improvement.

Questions Guiding the Literature Review

The following questions guide the literature review:

- 1) How are professional learning communities and communities of practice similar, different, and related?
- 2) How is knowledge development and sharing focused on within these concepts?

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Methodology

To answer the research questions, we reviewed multiple articles from a dozen national and international scholarly journals in both business and education. We used both a search of internet databases as well as a search of university library resources, utilizing key terms including “professional learning communities,” “communities of practice,” “organizational learning,” “knowledge development,” and “knowledge management.” Search results were further refined through the use of additional search terms such as “defining,” “school improvement,” and “education.” Additionally, we relied on information from seminal works written about the topics of professional learning communities, learning organizations, and communities of practice, as well as additional books and monographs related to the topics. Once the literature was reviewed, we compared the characteristics of the different models of professional learning communities and communities of practice to explore similarities and differences. We then analyzed the role of knowledge sharing in the models and drew conclusions based on that analysis. This review is not meant to be comprehensive as much as it was designed to explore and elucidate content related specifically to the research questions. In addition, one limitation is that we drew heavily on sources from the field of education, and thus may have excluded other pertinent documents.

Characteristics of Professional Learning Communities and Communities of Practice

In the following section, three models of professional learning communities (PLCs) and three models of communities of practice (CoPs) are briefly introduced in order to provide the reader with a basic understanding that will lead into the later discussion in this paper.

Dufour and Eaker (1998)

Dufour and Eaker (1998) are the impetus behind learning organizations being referred to as “professional learning communities” in the field of education. In their book, the authors make the distinction that the term “organization” connotes efficiency and structure, whereas “community” connotes individuals linked by common interest. Dufour and Eaker define a professional learning community as “educators [creating] an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone” (p. xii). The professional learning community that Dufour and Eaker envision has six characteristics:

- Shared mission, vision, and values
- Collective inquiry
- Collaborative teams
- Action orientation and experimentation
- Continuous improvement
- Results orientation

The Dufour and Eaker model of professional learning communities is a framework from which a school faculty can begin to shift the culture of their school in order to build capacity for implementing and sustaining change. The developers of the model also emphasize the importance of the roles the principal, parents and community play in establishing the learning community, as well as changes in the curricular focus of the school. Lesser attention is given to how collaborative teams function and the importance of sharing team learning school-wide.

Murphy & Lick (2004)

The Whole-Faculty Study Groups (WFSG) (Murphy & Lick, 2004) model draws from Senge’s (1990) learning organization theory and is grounded in what is known about collaborative learning. Initially created and implemented as a staff development model for the school system where Dr. Murphy served in the late 80’s and early 90’s, WFSG is a framework for implementing changes in curriculum, instruction, and classroom assessment in every classroom in a school. It links or connects professional development on curriculum, instruction, and classroom assessment to collaborative teams of teachers working together to apply their new learning to the student needs they are addressing through their study group action plans. The WFSG process is a step-by-step practical methodology for the development of study groups in schools to facilitate school-wide change and enhance learning processes and outcomes. There are five guiding principles for WFSG:

- Students are first
- Everyone participates
- Leadership is shared
- Responsibility is equal
- The work is public

The power in the WFSG process rests in what teachers do to become more knowledgeable and skillful at doing what will result in higher levels of student learning. Fundamental to WFSG is that the whole faculty participates. Each faculty member is a part of a study group that focuses on data-based student instructional needs. WFSG is a comprehensive framework for implementing the concept of professional learning communities.

Hord (2004)

Shirley Hord's (2004) model of professional learning communities is based on over a decade of research into school renewal and school reform. Her work with the Creating Communities of Continuous Inquiry and Improvement (CCCII) project, which began in the mid-1990's, gave rise to learning more about nurturing learning communities. Hord also draws upon Senge's learning organization theory in her work with professional learning communities. According to Hord, there are five dimensions of a professional learning community:

- Supportive and shared leadership
- Shared values and vision
- Collective learning and application of learning
- Supportive conditions
- Shared practice

Through this model schools gain a structure "for continuous improvement by building staff capacity for learning and change" (p.14). Similar to Dufour and Eaker's (1998) model, attention is given to the cultural shift that must occur if schools intend to become learning communities. Hord's model places emphasis on reflective dialogue as a vehicle for collective learning. Supportive conditions enable collective learning and shared practice. Unlike Murphy's (2004) model where faculty members work in small groups of four to six teachers, faculty may come together in groups as large as 30-40 in Hord's model.

Brown and Duguid (1991)

Building their concept of communities of practice (CoP) from an examination of studies of workplace practices, specifically Orr's (as cited in Brown & Duguid, 1991) studies of service technicians, Brown and Duguid highlight how informal groups form to 'get the work done' through generation of solutions to problems (Cox, 2005). The authors analyze three elements that are present in organizations, within the context of community: *working, learning, and innovation*. Brown and Duguid see CoPs as being counter-culture to the organization. Because CoPs are not usually a part of the formal organizational structure, the authors caution against the ability of an organization to ignore the knowledge and innovation that is produced within these communities. To counteract this possibility, Brown and Duguid call for the conceptualization of an organization as a 'community of communities' (1991).

Wenger, McDermott & Snyder (2002)

Wenger, McDermott & Snyder (2002) define communities of practice 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 in this area by interacting on an ongoing basis" (p.4). The authors build upon the theoretical work of Lave and Wenger (1991) and Wenger (1998), and focus on the organizational cultivation of CoPs. Wenger et. al (2002) describe communities of practice as having the following fundamental structures: *domain, community, and practice*. Communities of practice may take many forms; they may vary in size, life span, location (face-to-face vs. virtual), relationship to the organization, and composition (homogeneous vs. heterogeneous). Additionally they may be located entirely within an organization, or may span across organizational boundaries. They may be organic, or they may be intentionally formed by the organization. While Wenger, McDermott and Snyder believe in the value of communities of practice as a structure for creating and codifying knowledge, they also recognize that there is a downside to CoPs. Some of the problems associated with CoPs relate to the hoarding of knowledge, clique formation, limitation of innovation, and exclusiveness with regard to membership.

Saint-Onge and Wallace (2003)

Saint-Onge and Wallace approach communities of practice as vehicles for increasing intellectual capital and for improving individual, practice, and organizational performance. The authors also propose that communities of practice with a strategic purpose help to create an organization's competitive advantage. According to Saint-Onge & Wallace, "communities of practice may be the most significant, tangible example of knowledge management at work in an organization" (2003, p.50). This particular model is grounded in knowledge management theory and embraces the use of technology as appropriate to support communities of practice. Saint-Onge & Wallace organize communities of practice into three types; informal, supported, and structured. However, the authors state that across all three types there are common elements: *practice, people, and capabilities*. Communities of practice are recognized by Saint-Onge and Wallace as existing in a variety of forms as well as having varied support. However, the ones they propose here are strategic in nature and are highly structured. They rely on technology to some extent, and they are valued, supported, encouraged, and promoted by management as best practice, unlike those in Brown and Duguid's model.

Comparison of the Models

The models of professional learning communities and communities of practice described above have some common aspects, but they also vary widely (see Table 1). While the three professional learning community models all draw from learning organization theory (Senge, 1990), communities of practice models draw from situated cognition, social learning theory, or knowledge management theory. As the concept of communities of practice has grown over time, the focus has also shifted, from one of helping workers ‘get the job done,’ to utilization as a tool for

Table 1. *Comparison of characteristics of Professional learning community and Communities of Practice models*

Model	Theory base	Membership	Leadership	Organizational Culture	Knowledge Sharing
Dufour & Eaker (PLCs)	Learning Organization	Membership is a forgone conclusion by virtue of status as a faculty member; teachers are assigned to a collaborative team to work on substantive school issues	Principal; shares decision-making; provides staff with information and training; model behaviors congruent with vision and values; results - oriented	Shared mission, vision and values drive the work; collaboration is key; innovation, experimentation and a focus on results are vital aspects	Discussion is limited; team members collaborate, but how teams create new knowledge and share it with the whole organization is not discussed at length
Murphy & Lick (WFSG)	Learning Organization	Mandatory; entire school faculty participates in study groups of 3-8 members; groups ideally are cross-discipline and cross-grade level working on data-driven student needs	Leadership is shared within the study group; school administration monitors study groups and is a part of a larger school-wide leadership team	Data-based student needs drive the work; study group work is a shared responsibility among members; study groups may all have a different focus	Work is made public through study logs and action plans; study groups meet regularly and may use protocols for sharing; whole faculty sharing on an annual basis
Hord (PLCs)	Learning Organization	Membership is a forgone conclusion by virtue of status as a faculty member; size of learning teams varies (few people to whole faculty);	Provided by principal; should provide supportive conditions within the school	Shared vision and values drive the work; collaboration is achieved through shared practice; cultural shift is paramount to becoming a PLC	Teachers participate in reflective dialogue; peer coaching and feedback are also ways knowledge is shared
Brown & Duguid (CoPs)	Situated Cognition, Social Learning	Membership is voluntary; informal group of workers doing the same job	Informal structure; the community is egalitarian in nature	Culture is not necessarily supportive of informal structures	Narrative; collaborative; socially constructed; occurs within community
Wenger, McDermott & Snyder (CoPs)	Social Learning	Participation is voluntary; membership can either be self-selected or assigned by the organization; based on expertise or passion for a topic	Distributed; leadership comes from both formal and informal leaders, within and outside the community	Organization values innovation and knowledge sharing;	Occurs mainly within the community; however, exchange across and at community boundaries occurs when appropriate
Saint-Onge & Wallace (CoPs)	Knowledge Management	Voluntary participation; self-selected or assigned by the organization; communities may center around work type or strategic need	Provided by both members and management	Supportive of CoPs; nurtures level of trust and relationships so that collaboration can occur	Knowledge is accessed, created and shared within community; organization supports community networks to share across communities

knowledge management. This shift may explain how the different models grew from differing theory bases.

Membership varies across the models. Whether the membership is voluntary, by virtue of employment status, or explicitly mandated may indicate the degree of participation that the community experiences from its members. This is especially true for teachers if they do not see a direct, meaningful connection between the activities of the community and their work with students (Bakkenes et. al, 1999). Additionally, the make-up of the membership, whether based on work type, a common interest in a work-related issue or a strategic need of the organization influences the types of conversations that take place within the community. In this sense, professional learning communities are similar to communities of practice as described by Saint-Onge and Wallace (2003) and Wenger et.

al (2002). It is important to note that community within CoP literature refers to a collection of individuals working together for a common purpose within the organization, in terms of PLCs, the community is defined as the larger one of the whole organization. This differing perspective on community may play a part in how the organization views the work of the groups of individuals working together within the organization.

Leadership appears to be stronger externally in PLCs than in CoPs. All models with the exception of Hord's address leadership that is internal to the collaborative teams or to the CoP. Both Hord (2004) and Dufour and Eaker (1998) place strong emphasis on the role of the principal in establishing supportive conditions for team learning to take place, as well as their role in developing and implementing a shared vision and values. Scribner et al. (2003) point to school leadership as being instrumental in fostering a sense of trust and a shared sense of purpose. Other models do not place such emphasis on the external leadership of collaborative teams or communities of practice, yet they agree that support from external leadership is needed in order for the team or community to grow and mature (Murphy & Lick, 2004; Wenger et. al, 2002; Saint-Onge & Wallace, 2003).

Organizational culture in most models was one of shared vision, emphasis on collaboration, and trust. Murphy and Lick's WFSG model emphasizes data-driven decision-making, with shared vision, collaboration and trust being the more implicit elements of the organizational culture. Only Brown and Duguid's model views communities of practice as running somewhat counterculture to the organization. Yet, even they call for organizations to recognize and embrace communities of practice and the value that is added to the organization through community narratives and knowledge creation. The type of culture that is strived for in all the models is an ideal one, which may or may not already exist in the organization. Culture and norms are major determinants of the extent to which knowledge creation and organizational learning can occur. Leithwood et al. (1998) identified school culture and norms as one of five major variables influencing organizational learning.

Knowledge sharing also varies across models. In most models, knowledge sharing is treated as occurring through formal structures such as team meetings, reflective group dialogues, use of protocols or even virtual workspaces. Knowledge sharing, and possibly creation, seems to occur at the individual and maybe the group level, but it is unclear from the information on these models whether knowledge development actually extends to the organizational level, though in most models this is clearly the implied or stated hope. Dufour and Eaker (1998) provide little discussion as to how knowledge sharing occurs, except that it should and will occur naturally through engagement in collective inquiry. Brown and Duguid (1991) examine a more informal avenue of work-related knowledge sharing from the narrative standpoint. The researchers maintain that knowledge is shared through storytelling, which allows workers to explicate problems and build stories together that invent a solution.

In summary, the current literature on learning communities reviewed in this paper place more emphasis on the critical roles that leadership and school culture play in the formation of professional learning communities. The communities of practice literature, on the other hand, emphasizes the importance of the social aspect of learning in the formation of new knowledge, and does not seem to place as much emphasis on the role of leaders external to the community or on the culture outside of the community. Interestingly, neither body of literature actually fully analyzes the specific ways members engage in the knowledge development cycle. All of the frameworks or models for building professional learning community cited in this paper include, in some way, team learning and shared practice; however the depth of discussion addressing what learning teams would look like and how knowledge sharing actually occurs varies in each model and in most cases is quite ambiguous, with the exception of Murphy and Lick's WFSG model, which provides a guideline for study groups to follow.

Knowledge Development and Sharing Within the Models

The second question explored in this paper hones in even more on the issue raised above about the varied degree to which the PLC and CoP literatures focus on knowledge development and sharing. This discussion is grounded in the knowledge development cycle (See Figure 1) which is a useful concept to understand the importance of knowledge sharing as schools are trying to create professional learning communities to enhance organizational learning (Mulford & Silins, 2003). It consists of four phases: knowledge creation, knowledge adoption, knowledge distribution, and knowledge review and revision (Bhatt, 2000). Bhatt states that while the first two phases may be sufficient for a knowledge development cycle in an individual, the last two phases are critical for organizational knowledge development. Additionally, there are no arrows suggesting a flow through the cycle, because there are several 'feedback and feed forward' loops occurring throughout the phases, which make an accurate representation of the flow difficult to depict (Bhatt, 2000).

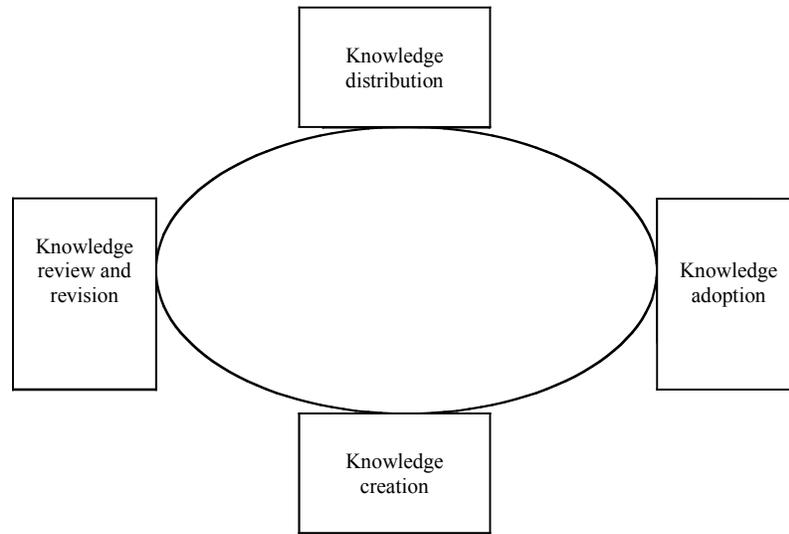


Figure 1. Knowledge development cycle (Bhatt, 2000)

The models reviewed in this paper focus on knowledge development and dissemination differently, and to varying degrees. Both the Hord and Dufour and Eaker models examine the factors involved in creating a school culture and, to an extent, the organizational structure that would foster conditions for professional conversations to take place. Dufour and Eaker, however, give little attention to the ways teachers are sharing knowledge outside of their collaborative team, which may be where some of the tacit knowledge is made explicit, and knowledge creation and adoption is taking place. Hord's model takes into account several ways that knowledge may be created and shared: through collaborative inquiry teams, through peer-coaching and feedback, and through reflective dialogue. In both the Hord and the Dufour and Eaker models, knowledge development and dissemination seems to be concentrated at the individual and group level. Murphy and Lick's model goes into detail about the knowledge development process within the study team, and the avenues through which that knowledge is made available to the larger organization. In each of these models, structures are discussed which may facilitate knowledge development and knowledge review and revision. There may even be ways discussed for knowledge distribution to take place, particularly in Murphy and Lick's model. However, it is unclear in each model how group knowledge is transformed into organizational knowledge and then adopted, which should result in organizational improvement.

The CoP literature and specifically the models described in this paper may offer more insight into the value of social and professional networks as related to knowledge creation and dissemination as well as the informal learning process that occurs in and among individuals, concepts that seem to be missing from the PLC literature. Brown and Duguid's (1991) use of storytelling as a mode for sharing work-related knowledge, is a good example of how knowledge is shared informally. However, even though these models appear to be more attentive to informal networks than the PLC literature, there is not sufficient evidence that such practices are widespread among organizations. Research on CoPs as stimulating the collective learning process indicates the one of the chief characteristics of a CoP, that of whether the group is formed organically or created through organizational structure, may be a determining factor in the extent to which the group functions as a CoP, producing collective learning outcomes (Mittendorff, Geijsel, Hoeve, de Laat, & Nieuwenhuis, 2006). The researchers conclude that CoPs may not be the best avenue for improving organizational learning because even groups that function as CoPs may sometimes be resistant to change and may not externalize their collective learning. Additionally, Boud and Middleton (2003), in their research on communities of practice and informal learning, found that individuals have "explicit contacts for learning" (p. 200), some of which are informal and some of which are created through organizational structure. The researchers posit that while the concept of communities of practice is a useful way to account for some of the learning phenomena of the workplace, it is insufficient to account for all of it.

Conclusions and Implications for HRD Research and Practice

From this comparison of several different models of professional learning communities and communities of practice, it is clear that the two concepts have been conceived in a variety of ways, which may account for the inability of school leaders to define and operationalize these concepts. Not only are the two concepts distinctly different, but also the models within each concept vary in terms of membership, leadership, and knowledge sharing. Although the PLC models address team or group learning that is focused on student needs and increasing student achievement, the models seem to place greater emphasis on the organizational level in terms of building a culture of collaboration that would lead to school improvement. While the CoP models address the need for alignment of the CoPs to the organization strategy, they are more focused on improvement of practice. Finally, PLC's in general seem to emphasize the role of the leader external of the community while the CoP literature seems to downplay that role in favor of a more "grassroots" leadership from within the community.

These important distinctions between the two concepts may help leaders and HRD professionals working in schools to recognize the value that each perspective offers, and integrate and utilize these perspectives to facilitate the learning and improvement that needs to take place among teachers to address student achievement outcomes. In addition, because the current models of PLC seem to be incomplete with regard to the knowledge development and dissemination process, work needs to be done to construct a more complete framework for professional learning communities that acknowledges and supports both the formal and informal learning that takes place at the individual, group, and organization level. Furthermore, scholars and practitioners should be working to explicate the connections between these levels rather than assuming that learning at the individual level will automatically transfer to the organization level. School administrators have long been focused on what the educational literature has to say about professional learning communities, which offers a valued perspective. However, cross-discipline exchange of information can many times yield new insights and lead to change. HRD professionals working with schools can facilitate a school's exploration of the communities of practice literature, which may uncover new ways of thinking that will ultimately enable the school to increase their organizational knowledge.

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