

A Case for a Community of Practice Approach to Collaborative Inquiry

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School and district-based initiatives flood the world of education at a rapid pace as leaders and policy makers attempt to prop up the perception of failing schools in America. Where a portion of the initiatives are in response to increased legislation and external pressure, all initiatives, no matter the origin of inception, are in response to perceived problems. Unfortunately, whether a response to mandates from the state or as a result of data based conclusions at any level, changes in practice occur so often that fidelity of implementation (FOI) cannot always be assured. The teaching profession has a long history of fragmentation and individualism that countermands collegial efforts. This “pedagogical solitude” (Shulman, 1993, p. 6) is a product of the design of American education and for some, a right, earned after years of self-determined mastery. DuFour (2011) indicated that the “situation will not change by merely encouraging teachers to collaborate, but will instead require embedding professional collaboration in the routine practice of the school” (p. 58). For this reason, it is imperative that schools begin to understand the benefits of a collaboration model that allows for discussion, evaluation, practice, and knowledge building that ensures more faithful implementation of new initiatives.

Communities of Practice

A Community of Practice (CoP) approach is a mechanism that has the potential to ensure implementation fidelity while creating a system and a forum for collaborative discussion among colleagues. Wenger, McDermott and 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). As it develops, a Community of Practice approach can successfully drive decision-making, ensure fidelity of implementation, and provide continuous evaluation

and discussion. Although there has been little research regarding the use of Communities of Practice in the education setting, business models have been explored and provide a blueprint for use in various settings. Additional research with educational Communities of Practice might focus on the way in which new instructional strategies or curricular programs might benefit from consistent collaboration. Also, schools could explore their use as a means of grade-level team building, cross-grade collaboration, and/or teacher/administration communities.

Community of Practice Theories and Models

The term, “Community of Practice” entered into the lexicon of learning with the Lave and Wenger’s (1990) *Institute for Research on Learning* report, later published as a book. Since that time, Communities of Practice have been the focus of learning theories, expanded on by Brown and Duguid (1991) and later by Saint-Onge and Wallace (2003) and practiced in a variety of settings, most consistently business.

The three CoP models investigated draw from three theories of learning: Situated Cognition, Social Learning, and Knowledge Management. Despite their disparate philosophies, each of the theories undergirds the definition of a Community of Practice; that is a process of collaborative learning that evolves when people interact with common goals through the sharing of cultural practices.

In Situated Cognition theory, knowledge is considered a verb, an action that takes place between the agent and the environment (Barab & Roth, 2006, p. 3). Since cognition cannot be separated from the context of learning, the cultural and historical constructions are paramount (Lave & Wenger, 1991). Situated Cognition is one of the two foundational roots of the Brown and Duguid (1991) model of CoP.

Social Learning theory posits that learning is a cognitive process, occurring in a social context where information is extracted through observations or the description of desired behavior (Grusec, 1992). A form of reciprocal learning, Social Learning theory allows interaction and observation of behavior to drive the collaboration among participants to construct knowledge. The theory is different from Situated Cognition in that the interaction relies more heavily on observation among participants although all participants share the responsibility of sharing and demonstrating. It is the foremost theory of learning on which the Lave and Wenger (1990) model is based.

Knowledge Management (KP) informs the Saint-Onge and Wallace (2003) model of CoP, where KP refers to the “process of capturing, distributing, and effectively using knowledge” (Davenport & Prusak, 1998, p.). Whereas knowledge is cumulative and transferable in this model, reserved originally for business corporations, in the context of a Community of Practice, knowledge does not have to be explicit, rather implicit and tacit knowledge is shared and distributed for the improvement of all participants.

Variations among the three models of CoP exist, but what binds them together is the same theory that sets CoP apart from other professional learning communities: participation is not mandatory. Although membership can be assigned by the organization, members share a passion for the subject and share a strategic need for the collaboration. Only the Brown and Duguid (1991) model views the membership in a CoP as completely voluntary and informal, where the community is egalitarian in nature. Both the Lave and Wenger (1991) model and the Saint-Onge and Wallace (2003) approach believe that distributed leadership, both inside and outside of the community, fuels the collaboration. In some senses, this can influence the interaction within the group but can have a supportive impact for the maturation of the community (Wenger, 1998; Saint-Onge & Wallace, 2003). Still, the literature on communities of practice emphasizes the importance of social learning to form new knowledge regardless of the presence of external leadership.

Knowledge sharing among the three models converges according to the theory of learning that underpins the model. In the Brown and Duguid (1991) model, for example, storytelling is the primary vehicle for knowledge sharing. Members build stories collectively and clarify problems to create solutions. Knowledge sharing also takes place in the Lave and Wenger (1990) model as well as the Saint-Onge and Wallace (2003) approach, but it is not restricted to storytelling and instead, as suggested by the theories of learning that support them, includes behavioral observation and sharing and can cross the boundaries of the CoP to networks outside of the community.

Program Components

Community of Practice, when implemented with fidelity, is believed to yield more authentic and consistent implementation of new initiatives across participants. To employ such a collaborative practice, it is important to identify the critical components of an effective CoP. The Lave and Wenger (1990) model offers both the critical components and the development stages, providing a detailed roadmap to the identification, conceptualization and operationalization of a CoP.

Integral to a Community of Practice is the existence of a domain, a community, and a practice (Wenger, et. al, 2002). The “domain” is an area of shared inquiry around key issues identified by the participants. The “community” refers to the sense of belonging as relationships and group identity is built. “Practice” indicates the body of knowledge, including the methods, stories, cases, tools and documents that live and breathe within the community. These three aspects are not as much a list of critical components as they are the framework for the actualization of a CoP. That is, to have all three means a CoP is in development. A CoP may vary in size, continue over a long or short span of time, cross organizational boundaries, and may be instigated organically or through organizational assignment.

Critical components of a Community of Practice come from the Lave and Wenger model. Wenger (1997) posited that distinct dimensions of practice

are critical in the development of a CoP. Without them, the CoP does not function. Although there may be collaboration, the sustainability of the CoP lies in the existence of

- mutual engagement
- joint enterprise
- shared repertoire (p. 73)

In mutual engagement, members of the CoP engage through negotiation of separate realities. To enable such engagement, members must be included in what matters, their diversity and partiality fuel the community as much as their collectivity. In the Lave and Wenger model, each member “finds a unique place and gains a unique identity, which is both further integrated and further defined in the course of engagement in practice (Wenger, 1997, p. 76). It is not the goal of a CoP to create homogeneity as much as it is a sharing of discrete or universal knowledge just so long as it is given and received through mutual engagement. Forcing an idealized view is counter to a CoP since meaning is made from the experiences of others, both observed and shared within the practice. Mutual engagement, therefore, is not a matter of harmonious interactions. Indeed, the interpersonal conflicts and tensions authenticate the engagement and stimulate growth, resulting in relational norms (Wenger, 1998).

Joint enterprise is the result of mutual engagement. Wenger (1998) sees it as the groups “negotiated response to their situation and thus belongs to them in a profound sense, in spite of all the forces and influences that are beyond their control” (p. 77). Since mutual engagement embraces differences in experience, expertise and attitudes, a joint enterprise is where the community negotiates the differences, resulting in a collective product or understanding.

The third dimension of a CoP is shared repertoire of routines, methods, symbols, and concepts defined and developed through the course of the CoP and that have become part of the very discourse of their negotiated identity. The repertoire should “reflect a history of mutual engagement and remain inherently ambiguous”

(Wenger, 1998, p. 83). In this way, members can capture, codify and store tacit knowledge from their valuable context-based experiences (Davenport & Prusak, 2000).

What sets a CoP apart from other cooperating groups is that all participants are experts, rather than an external trainer who serves as the trainer or developer of knowledge. A CoP may be guided by management or an organization leader, but the role is relegated to a sponsor-like position, referred to by Wenger (1998) as a “Broker.” Issues arise from having a Broker in any CoP, however. Wenger (1998) advised those in Broker positions against “two opposite tendencies: being pulled to become full members and being rejected as intruders” and encourages that the “contributions lie precisely in being neither in nor out” (p. 110). The presence of a Broker during the development of the CoP may potentially mean that the CoP is affected by subtle pressure to conform to the organization’s goals for the CoP.

Stages of Development

In order to determine the fidelity of implementation of a CoP, it is not only important to understand the critical components of joint enterprise, mutual engagement, and a shared repertoire, it is necessary to understand how and where they exist within the defined stages of development. Such phases are the ways in which participants come together, share knowledge and create a new identity that services the work in practice. Identification of specific stages is a slight paradox of the process; however, since the very nature of a CoP is the organic development of shared knowledge and identity around a domain. As such, the stages in the literature “must be considered indicative rather than prescriptive” (Wenger, n.d.).

Wenger identified five stages of development: potential, coalescing, maturing, stewardship, and legacy as shown in Table 1. In the first stage, *potential*, a group of people with similar interests begins to form. This formation may occur naturally and organically come together over a shared topic of interest or concern, but it may also

be “seeded by the organization” (Wenger, n.d.) just as long as the participants recognize the community needs and are willing to build knowledge on them.

The *coalescing* stage is often a transitional stage with spikes of energy as the community forms around ideas of interest and an understanding of the scope of work ahead sets in. The potential areas of concern for the CoP formation in this stage is the drop off of interest as participants become absorbed in other projects, organizational leaders are pulled away and participants don’t always find immediate value. According to Wenger, “People may interpret the loss of interest as a lack of real value or become impatient. Building relationships, helping each other, discovering what knowledge is really useful to share, all this takes time and it is important to shepherd the community through this stage” (Wenger, n.d.). Successful attributes of this stage include weekly meetings, documents that form and interactions become more systematic. Sharing of tools, templates, and new knowledge begins as the shape of the community builds.

In stage 3, *maturing*, the CoP has built a “communal identity” (Wenger, n.d.) and their commitment to the practice has grown into relevancy, reliance on the CoP for making meaning, identifying gaps in the shared knowledge and searching for solutions to fix them. The potential risks at this stage is the reluctance to “disrupt the formal intimacy of the initial group” and a resistance to steward knowledge to others outside of the CoP.

The *stewardship* stage members may change as people leave, leadership changes, etc., but that is part of the stage. If a CoP has truly been developed, the core members are fully prepared to steward knowledge and equally important, become flexible to new practices and experiences of new members. In this stage, the practice has reached its full potential and the strategic thinking about the knowledge created and still to come takes center stage. In this stage, the CoP “has to maintain energy and explore the leading edge of its practice” (Wenger, n.d.). The potential risk at this stage occurs when the external organization makes a

decision in the CoP domain without consulting the CoP, devaluing its place in the larger context.

The final stage of development is *legacy*, where the CoP naturally ends due to new projects or becoming fused into a larger context. Wenger (n.d.) saw the ending as an integral part of any community and participants should do the work to consider the legacy they want to leave behind. One of the dangers of “over-institutionalizing a community” is that participants want the CoP to survive for the sake of the work that has been done and the relationships that have been developed (Wenger, n.d.).

Contributing Factors

Important to note are the uses of engagement, alignment, and imagination, all of which contribute to a successful CoP (Wenger, 1998), used most specifically during the *maturing* and *stewardship* stages. Engagement includes the work of defining a common enterprise, accumulating history of shared experiences, producing a local regime of competence, developing interpersonal relationships, and trajectories for both the individual’s practice and the group at large (p. 184).

Alignment might be seen as a critical component since its absence means the CoP becomes a vehicle to develop procedures and urges compliance rather than shared, new knowledge development. Alignment works in tandem with engagement, where participants create a focus to coordinate the investment of time, find common ground, use power to impose views, inspire, unite and convince, proposing stories of identity, devising procedures, and reconciling diverging perspectives (Wenger, 1998, p. 187).

Imagination is also at work in a successful CoP. Its presence allows participants to “disengage and look at the (CoP) engagement through the eyes of an outsider” (Wenger, 1998, p. 185). Characteristics of this phase of a CoP are recognizing and knowing about the experience of others, defining a connection of the knowledge in an extended way, conceiving of new contexts for the practice, opening access through excursions

(observations, visiting), creating visuals and models, and documenting historical developments and defining them in new terms (Wenger, 1998, p. 185). This is a significant portion of the *stewardship* stage of development.

Table 1

Stages of Development of a CoP, the Attributes and the Alignment to Critical Components

Stage of Development	Attributes	Critical components	Skills at work
Potential	A group with similar interests begins to form	<i>Joint Enterprise</i> emerges	Engagement
Coalescing	Transitional stage where ideas of interest begin to merge	<i>Joint Enterprise</i> is sustained; <i>Mutual Engagement</i> begins	Engagement
Maturing	A community identity is built and reliance on the CoP is fully actualized	<i>Mutual Engagement & Shared Repertoire</i> are fully operationalized	Engagement Alignment
Stewardship	Members steward knowledge; new members and experiences are welcome and assimilated	<i>Mutual Engagement & Shared Repertoire</i> continue; <i>Joint Enterprise</i> may be revised	Engagement Alignment Imagination
Legacy	CoP project ends or is fused into a larger context	<i>Shared Repertoire</i> can transfer to external entities	Imagination

Research Findings on Communities of Practice

As the concept of a Community of Practice began first as a business model of collaboration, less research has been done on its effectiveness in schools and the field of education. Borg (2012) concluded, “Despite the significant number of case-based reports in the literature, there are few

empirical studies that document how communities of practice are born, how they work and evolve and how they can be sustained in educational communities” (p. 315). Regardless of the lagging empirical research specifically based on communities of practice, we know that “effective teachers also work collaboratively with other staff members. They are willing to share their ideas and assist other teachers with difficulties. Collaborative environments create positive working relationships and help retain teachers” (Stronge, 2007, p. 29). The call for more collaboration time is clear. Stronge (2010) reported that, “when asked what steps would they initiate to improve the effectiveness of teachers in their school, these effective teachers responded: 39% more social/collaborative time; 22% time for teachers to get together; 18% have teachers observe other teachers/schools” (p. 91).

Support for Communities of Practice

The literature on Communities of Practice both support the process as an effective collaboration tool and identify the potential issues that can erode a CoP. In support of Communities of Practice, the issue of teacher isolation, which can be pervasive, thwarts efforts to implement initiatives with fidelity. A recent study by Scholastic and the Gates Foundation (2012) determined that teachers spend about 3 percent of their teaching day collaborating with other teachers (p. 14), which indicates the planning of curriculum and instruction occurs alone. Without embedded collaboration, consistent and authentic implementation of common curricula and instructional practices cannot be determined, resulting in a skewed perception of FOI. Decades of research point consistently to the fact that teaching and learning are strengthened when “teachers collectively question ineffective teaching routines, examine new conceptions of teaching and learning, find generative means to acknowledge and respond to difference and conflict, and engage actively in supporting professional growth” (Little, 2001, p. 917).

These collaborative practices can vary in approach, but Brown and Duguid (1991) believe that a CoP is the most effective method for relaying

information and experiences, ensuring the development of community knowledge. Research conducted at the Centre of Environmental Education indicated that teachers involved in a community of practice noted that “changes that had been agreed upon after each reflective dialogue, discovered that the results were getting better and better every time” (Flogaitis, et.al, 2012, p. 222).

Potential Roadblocks

In addition to support for CoP formation, the literature provides cautionary tales as well. Balkanization, when strong groups reflect indifference and hostility to other groups, goes beyond the necessary loyalty needed in a CoP. Such factionalism can inhibit initiatives and innovation as the group fails to see their place in the larger organization (Wenger et al, 2002; Fullan, 1993). Fuller (2007) expands on this notion of group isolation, “the notion of learning in communities of practice places too much emphasis on the learning that takes place ‘inside the community’ and does not reflect the importance of the learning that takes place through participation in multiple social places” (p. 26).

Another issue of practice arises within the participant group when members cannot “put aside their personal perceptions and to adapt to the collective decisions of the community of practice” (Flogaitis et al, p. 225). Wenger et al (2002) also highlighted the concern that Communities of Practice can suffer internal wars. Such disagreement is not altogether a problem as Fullan (2001) argued that people “are more likely to learn something from people who disagree with us than [they] are from people who agree” (p. 41).

Communities of Practice can also become places to share unproductive frustration and the collaboration disintegrates into venting sessions about the outside organization. This hampers the group who disengages from the original joint enterprise and instead forms a community of collective discontent (Wenger et al., 2002). Related to misplaced purpose, some communities focus too heavily on documentation so that the purpose becomes creating documents. Wenger (1998) noted

that, “competence can become so locally ingrained, and socially efficacious that it becomes insular” (p. 175).

Lastly, groups that function as Communities of Practice may sometimes be resistant to change and may not externalize their collective learning (Mittendorff et al., 2006, p.301). Educators have a tendency to internalize their teaching and learning practices over time (Trowler & Cooper, 2002) so that they become “inextricably linked to academic identity” (Green & Ruutz, 2008). In an institution with a significant number of veterans, resistance to change is a likely potential issue that can hinder the groups’ progress toward mutual engagement and shared repertoire.

Despite the potentials setbacks in the development of a successful CoP, it is more important than ever for educational institutions to consider them as viable vehicles for collaboration. It is clear that “the school’s function as a learning organization can be accomplished when it relies on cooperation, interaction and reflective dialogue that are developed by the members of the education institution through the learning communities they form” (Flogaitis, et. al, 2012, p. 219). As educational accountability climbs, the hope for increased student achievement will require more embedded forms of collaboration among teachers. Without such collaborative work, measuring and assessing the effectiveness of any initiative is futile.

Moreover, teachers continue to work in isolation, implementing programs without benefit of shared experience, creation of collective knowledge, and evaluation of strategies. Perhaps the expected outcomes occur, but that will not assure the validity of the data. Teachers that manipulate strategies to teaching style, student response, and other variables contaminate the program and if success is achieved, it cannot be determined if the program is the reason or the way in which the teacher changed the design. That is not to say that teachers should not differentiate the program strategies or instructional design; rather they should communicate changes, reach consensus on new knowledge and with the mutual engagement

of practice, becomes a community of learners.

References

- Barab, S. & Roth, W. (2006). Curriculum-based ecosystems: Supporting knowing from an ecological perspective, *Educational Researcher*, 35 (5), 3-13.
- Borg, T. (2012, November). The evolution of a teacher community of practice: Identifying facilitating and constraining factors. *Studies in Continuing Education*, 34(3), 301-317.
- Brown, J.S. & Duguid, P. (1991). Organizational learning and communities of practice: Toward a unified view of working, learning, and innovation. *Organization Science*, 2(1), 40-75.
- Davenport, T.H. & Prusak, L. (2000). *Working knowledge: How organizations manage what they know. 2nd Edition*. Cambridge, MA: Harvard School Press.
- DuFour, R. (February 2011). Work together but only if you want to. *Kappan*. V92 (N5), 57-61.
- Flogaitis, E., Nomikou, C., Naoum, E., Katsenou, C. (2012, April). Investigating the possibilities of creating a Community of Practice. Action Research in three educational institutions. *Journal for Critical Education Policy Studies*, 19(1), 217-233. Retrieved from <http://www.jceps.com/?pageID=article&articleID=251>
- Fuller, A. (2007). Critiquing theories of learning and communities of practice. In J. Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of practice: Critical perspectives*. Milton Park, England: Routledge.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Green, W. & Ruutz, A. (2008, July). Fit for purpose: Designing a faculty-based community of practice. *Engaging Communities, Proceedings of the 31st HERDSA Annual Conference*, Rotorua, 163-172. Retrieved from <http://espace.library.uq.edu.au/view/UQ:175959>
- Grusec, J. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology* 28(5).
- Lave, J., and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Little, J. W., (2002). Locating learning in teachers' communities of practice: Opening up problems of analysis in records of everyday work. *Teaching and Teacher Education*. 18, 917-946. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0742051X02000525>
- Mittendorff, K. Geijsel, F., Hoeve, A., deLaat, M., & Nieuwenhuis, L. (2006). Communities of practice as stimulating forces for collecting learning. *Journal of Workplace Learning*, 18(5), 298-312.
- Saint-Onge, H. & Wallace, D. (2003). *Leveraging communities of practice for strategic advantage*. Boston, MA: Butterworth-Heinemann.
- Scholastic & Bill and Melinda Gates Foundation. (2012). *Primary Sources: 2012 America's Teachers on the Teaching Profession*. Retrieved from http://www.scholastic.com/primarysources/pdfs/Gates2012_full.pdf
- Shulman, L. (1993). Teaching as community property: Putting an end to pedagogical solitude. *The Magazine of Higher Learning*. 25(6).
- Stronge, J. H. (2007). *Qualities of effective teachers, 2nd ed*. Alexandria, VA: Association for Supervision and Curriculum Development.

Stronge, J. H. (2010). *Effective teachers = student achievement*. New York: Eye on Education.

Trowler, P. & Cooper, A. (2002). Teaching and learning regimes: Implicit theories and recurrent practice in the enhancement of teaching and learning through educational programmes. *Higher Education Research and Development*, 21(3), 221-240.

Wenger, E., (1998). *Communities of practice: Learning meaning and identity*. Cambridge: Cambridge University Press.

Wenger, E. (n.d.)
www.partnership.esflive.eu/files/CoP_development_stages.pdf

Wenger, E., McDermott, R. & Snyder, W. (2002). *Cultivating communities of practice*. Boston: Harvard Business School Press.