Evaluating the Imperative of Intraorganizational Collaboration
A School Improvement Perspective

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Abstract: "Collaboration" is a ubiquitously championed concept and widely recognized across the public and private sectors as the foundation on which the capacity for addressing complex issues is predicated. For those invested in organizational improvement, high-quality collaboration has become no less than an imperative. However, evaluators and program stakeholders often struggle to assess the quality of collaborative dynamics and the merits of collaborative structures. In this article, the authors describe an approach to demystifying and assessing interpersonal collaboration and use their consultancy work with school improvement stakeholders to illustrate a multistage collaboration evaluation process. Evaluators in a wide range of organizational settings are encouraged to utilize collaboration theory and the evaluation strategies presented herein to cultivate stakeholder capacity to understand, examine, and capitalize on the power of collaboration.

Keywords: collaboration theory; communities of practice; organizational learning; school improvement

> The purpose of school is to see to it that all of our students learn at high levels, and the future of our students depends on our success. We must work collaboratively to achieve that purpose, because it is impossible to accomplish if we work in isolation.
>
> Dufour, Eaker, & Dufour, 2005, pp. 232-233

Collaboration is widely recognized as the means through which any chance of addressing complex societal issues and successfully reaching essential organizational outcomes is predicated (Austin, 2000; Hesselbein & Whitehead, 2000; Hogue, 1993; Preece, 2004). Hence, the evaluation of interpersonal collaboration has become an imperative for all complex organizations, including schools (Dufour et al., 2005; Gajda, 2006), nonprofits (Bailey & Koney, 2000), businesses (Attwood, Pedler, Pritchard, & Wilkinson, 2003; Senge, Ross, Smith, Roberts, & Kleiner, 1994), law enforcement (Dryfoos, 1990; Elliot, Hamburg, & Williams, 1998), governments (Korton, 2001), and public–private partnerships (Agranoff & McGuire, 2003; Milward & Provan, 1998). Communities of practice are the embodiment of interpersonal collaboration within an organization in which the individual members of a social learning system

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share common practices and work together to achieve mutually desired outcomes. Multiple communities of practice interact with one another to form the most basic intraorganizational building blocks (Peters, 1987), making organizations essentially "constellations of communities of practice" (Wenger, 1998). It is through interconnected communities of practice whose members are engaged in high-quality interpersonal collaboration that an organization learns to adapt, grow, and change successfully. As Brown and Duguid (1995) attest, "Workplace learning is being understood . . . in terms of communities being formed or joined and personal identities being changed" (p. 65). Simply stated, significant organizational improvement cannot be accomplished by even the most knowledgeable individuals working alone (Peters & Waterman, 1982).

The role that evaluation plays in deepening practitioners' understanding of collaboration is now just emerging. Practices such as empowerment evaluation (Fetterman, 2001), utilization-based evaluation (Patton, 1997), participatory action research (Park, Brydon-Miller, Hall, & Jackson, 1993; Whyte, 1991), and action research (Argryis & Schon, 1996; Koliba & Lathrop, in press; McNiff, 1992) are presented within the context of a collaboration between the evaluator and practitioner, integrating notions of collaboration into the evaluation process itself. Thus, the evolution of collaboration theories bears implications for the study of inter- and intraorganizational collaboration. It also stands to contribute to the development of better collaborative arrangements between evaluators and practitioners. Fetterman acknowledged this when he asserted how a community of practice is formed between the evaluator and his or her clients (2001). Koliba and Lathrop have gone as far as to assert that the validity of data stemming from an evaluation process is enhanced when the collaborative relationship is strong (in press).

Although collaboration is viewed as an imperative across almost all sectors, the role of collaboration in supporting student learning is a particularly useful place to advance evaluation practice in relation to the examination of intra- and interorganizational collaboration. As we shall see, collaboration is almost universally valued as an essential element of school reform. The relative uniformity of most public schools systems and the attention paid to professional development and strategic planning within school systems provide ample opportunities for evaluators interested in utilizing collaboration theory to develop, refine, and apply it. Although this article focuses on the application of collaboration theory to schools and schooling, the tools presented here are applicable to other settings.

Collaboration and Schooling

Nearly all major educational institutions, foundations, bargaining units, accrediting bodies, and educational sponsors at all levels of schooling openly endorse interpersonal practitioner collaboration as the most powerful strategy for sustained, substantive school improvement. As Scribner, Sunday Cockrell, Cockrell, and Valentine (1999) assert,

> Educational policy makers and practitioners increasingly call for new ways of reculturing schools into community-like organizations characterized by shared norms and values, a focus on student learning, reflective dialogue, deprivatization of practice, and collaboration. (p. 130)

The National Association of Elementary School Principals (2002) and the National Association of Secondary School Principals (2004) urge administrators to cultivate school improvement and student-level outcomes through the development of collaborative leadership and professional learning communities. According to the National Middle School Association and the Carnegie Foundation (Jackson & Davis, 2000), district and school leaders must "encourage consistent

collaboration among all teachers and support personnel in the school. . . . Creating teams of teachers and students is a vital part of developing a middle grades learning community" (p. 125). The National Commission on Teaching and America's Future (2003) asserts that quality teaching is predicated on strong collaboration; the National Board for Professional Teaching Standards (2004) claims that for schools to work effectively, teachers must work collaboratively with their colleagues in professional learning communities; and the American Federation of Teachers (2004) declares that educators should be engaged in a "continuous process of individual and collective examination and improvement of practice" (para. 2).

A striking indication that the imperative of interpersonal collaboration has become a key feature of school restructuring efforts comes from the recommendations put forth by the National Staff Development Council (NSDC). The NSDC (2005) adopted standards to improve schools, the first of which asserts, "staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district" (para. 1). In effect, the NSDC considers the cultivation of communities of practice predicated on interpersonal collaboration to be the foremost strategy for improving the learning of all students and recommends specific resources that educators can use to address the collaboration imperative, including *Moving the NSDC Standards Into Practice: Innovation Configurations* (Hord & Roy, 2003). Contemporary school reform efforts call for a radical shift from the predominant view of schools as bureaucratic and hierarchically ordered organizations to that of schools as communities of practice. To reach essential prekindergarten through Grade 12 outcomes, such as a healthy school climate and increased student performance, educators are being challenged to capitalize on the power of interpersonal collaboration.

In this article, we share collaboration theory and how we have utilized such theory to develop evaluation strategies that increase stakeholder capacity to understand, examine, and capitalize on the power of intraorganizational collaboration. Our discussion will be framed in relation to our evaluation work with two statewide school improvement efforts, both of which are predicated on the establishment and sustainability of high-quality intraorganizational, interpersonal collaboration. The first, called High Schools on the Move, is sponsored by the Vermont State Department of Education (DOE), a regional educational service authority, and a private foundation grant. High Schools on the Move is a school improvement intervention that involves on-site visits by DOE personnel (including the commissioner) to each of the state's public and technical secondary schools and an in-depth study group process for selected school districts. In 2004–2005, six school-based leadership teams made up of administrators and teachers were chosen through a competitive application process to participate in the High Schools on the Move study group. In the study group, participants examine the relationship between school improvement, student achievement, and professional learning communities. As of December 2006, nearly 100% of Vermont's secondary schools have been visited by DOE personnel as part of the study group, and five new school teams have been selected to participate in the 2006–2007 iteration of the process.

The second initiative for which we consult as evaluators, Teaching All Secondary Students, is a 3-year, grant-supported professional development program sponsored by the Higher Education Collaborative. The Higher Education Collaborative is a partnership of the state DOE, the University of Vermont, and the Vermont State College System. In its pilot year, Teaching All Secondary Students served 64 educators who met weekly in an on-site course focused on research-based best practices in curriculum development and communities of practice. A fundamental component of the initiative is the systematic reordering of a school's organizational structure in order to establish and support high-quality interpersonal collaboration among educators in the school setting.

High Schools on the Move and Teaching All Secondary Students are the state's most extensive secondary school improvement initiatives. They are designed to foster student empowerment, performance, and achievement through the establishment of collaborative school cultures (Vermont Higher Education Collaborative, 2006). The DOE is a key sponsor and stakeholder of both initiatives, and its policy makers are keenly interested in evaluating their programmatic development. As evaluation consultants with expertise in applied research, organizational development, and secondary schooling, we were contracted to carry out three primary tasks: (a) to facilitate a learning experience in which participants would come to understand the nature and characteristics of collaboration; (b) to help program stakeholders identify and inventory their school-based communities of practice; and (c) to collect, analyze, and report school-specific quantitative and qualitative data regarding the development of collaboration. A key evaluation deliverable was the development of instruments and/or tools that practitioners could use (eventually without assistance from external evaluators) to recognize and assess the quality of interpersonal collaboration over time. Regardless of the organizational setting, whether nonprofit or private, evaluators engaged in the systematic study of collaboration will likely need to produce similar types of deliverables.

Fundamental Characteristics of Interpersonal Collaboration

It was essential in preparing to carry out the more practical aspects of the evaluation for us to develop a theoretical foundation for our work. We delved into the existing research and literature and distilled six fundamental characteristics of interpersonal collaboration that will be of primary importance to organizational stakeholders seeking to understand, examine, and capitalize on the power of interpersonal collaboration. These key traits are (a) shared purpose, (b) cycle of inquiry, (c) dialogue, (d) decision making, (e) action, and (f) evaluation. In this section, we explain each fundamental characteristic, reference the literature that describes its attributes, and present the Community of Practice: Collaboration Assessment Rubric (CoPCAR) that articulates the elements of interpersonal collaboration in a succinct and accessible format. Although we describe the characteristics of collaboration in relation to school improvement, the theoretical constructs are generalizable and would prove useful to evaluators in a wide range of organizational settings.

Shared Purpose

The sine qua non of all types of collaboration is a shared purpose: Two or more entities come together for a reason—to achieve a vision or to do something—that could not be accomplished in isolation. When organizations come together, it is referred to as "strategic alliance" (Austin, 2000).[1] When people come together *within* organizations, it is referred to as "communities of practice" (Wenger, 1998). As basic organizational building blocks, CoPs will share a task or "domain" around which they have formed (or have been formed) to accomplish (Wenger, 1998). Increases in student achievement, engagement, and performance are considered the most important organizational purposes around which a school-based CoP can form (Dufour, Eaker, & Dufour, 2005; Hord, 2004; Louis & Kruse, 1995; Sparks, 2005). Organizations form strategic alliances in order to achieve outcomes that could not be reached as independent agencies working alone (Austin, 2000); in parallel fashion, school-based CoPs form between individual educators with the purpose of improving outcomes related to student learning.

Figure 1
Interpersonal Collaboration as a Cycle of Inquiry
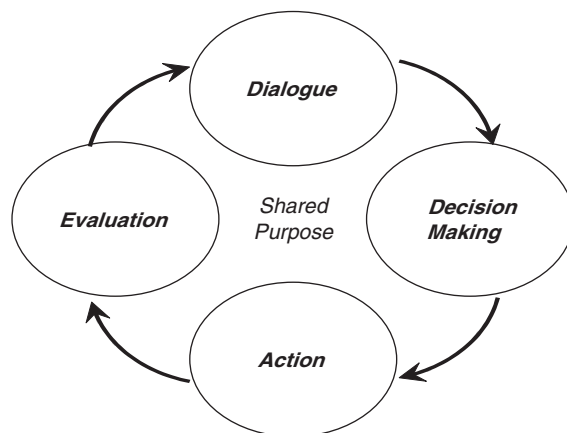
Cycle of Inquiry

Just as interorganizational collaboration is said to go through an ongoing renewal process in which they (a) assemble and form, (b) storm and order, (c) norm and perform, and (d) transform or adjourn (Bailey & Koney, 2000; Tuckman & Jenson, 1977), intraorganizational collaboration also undergoes a dynamic cycle of inquiry. CoPs are said to engage in varying degrees of person-to-person communication, decision making, interdependent actions, and reflection on the efficacy of those actions in order to change practice and improve performance. The school improvement literature treats interpersonal collaboration as a cycle of inquiry that involves collective dialogue, decision making, action, and evaluation as its essential components. Hord (2004) refers to professional learning communities as "communities of continuous inquiry" (p. 1), and Little (1987), in her landmark study on the phenomenon of teacher collaboration, describes CoPs as educator groups who engage in "frequent, continuous, and increasingly concrete and precise talk about teaching practice" (pp. 12-13). Goodlad, Mantle-Bromley, and Goodlad (2004) invoke the acronym "DDAE" as a shorthand reference to the cycle of inquiry and assert the ongoing process of dialogue, decision making, action, and evaluation as "the single-most important vehicle for school renewal" (p. 110). Interpersonal collaboration as a purposeful cycle of continuous inquiry is depicted in Figure 1.

It is the dynamic cycle of DDAE that enables an organization to prevent conditions from eroding, address challenges as they arise, improve organizational adaptation, and sustain those changes that have been determined to be worthwhile. Minimal or poor-quality collaboration reduces a school's capacity to affect student achievement, engagement, and performance positively. However, when educators engage in high-quality DDAE focused explicitly on students' learning goals, "it pays off in high-quality solutions to problems, increased teacher confidence, and remarkable gains in achievement" (Schmoker, 2005, p. xiii).

Dialogue. Collaboration implies some degree of person-to-person communication in any organizational setting, rendering dialogue an essential characteristic of CoPs. Interpersonal communication among school personnel involves face-to-face sharing of teaching practices and a shared dialogue about improving those practices. Yankelovich (1999) maintains that

when dialogue is done skillfully, the results can be extraordinary: long-standing stereotypes dissolved, mistrust overcome, mutual understanding achieved, visions shaped and grounded in shared purpose, people previously at odds with one another aligned on objectives and strategies, new common ground discovered, new perspective and insight gained, new levels of creativity stimulated, and bonds of community strengthened. (p. 16)

In a school-based context, dialogue is focused on making sense of complex data related to practice and effects of practice on essential student outcomes; thus, important disagreements and therefore tension will inevitably arise. Although low-functioning and nonrigorous forms of interpersonal dialogue tend to "confirm present practice without evaluating its worth" (Little, 1990, p. 517), high-functioning CoPs will recognize, address, and resolve their differences (Hord, 2004). School improvement experts warn educators to avoid "collaboration lite," whereby practitioners confuse mere congeniality and imprecise conversation with the serious professional dialogue vital to school improvement (Barth, 1990).

Decision making. In a high-functioning CoP, whether it be in a school, business, health, or other organizational setting, all members actively determine the merit and worth of their practices and make choices about what to do and what to stop doing. It is through the act of decision making that a CoP articulates its choices; therefore, decision making is an inherent characteristic of interpersonal collaboration in any organizational context. Merely sharing ideas and swapping strategies is not enough to improve practice. In a school setting, educators must recognize relative differences in pedagogical quality and make evidence-based decisions about what to do next. Schmoker (2005) asserts that school "improvement demands an overt acknowledgement that some teaching had a greater impact on learning" (p. 142). In a high-functioning CoP, the decision-making process is transparent and informed by dialogue; group members know why and how a decision is made. As Hord (2004) attests, "staff [in a CoP] are encouraged not only to be involved in the process of developing a shared vision, but to use that vision as a guide in making all decisions about teaching and learning in the school" (p. 9).

Action. Regardless of whether it is documented in writing or verbally expressed, a mutually agreed on decision or plan for action, by itself, leads to nothing. CoPs, and the individuals within them, must take actions related to practice if the decision is to change organizational performance for the better. As Pfeffer and Sutton (2000) established, "existing research on the effectiveness of formal planning is clear. . . . Planning is essentially unrelated to organizational performance" (p. 42). Because the purpose of school-based CoPs is complex—to cultivate student learning—commensurate actions and changes in practice will necessarily be transformational and challenging. As Little (1987) asserts, high-quality practitioner action-taking will be "adequate to the complexities of teaching" (p. 12).

Evaluation. The extent to which a decision and action have merit or are worthwhile is determined through the systematic collection and analysis of performance data, rendering evaluation an essential characteristic of intraorganizational collaboration. CoPs "absolutely cannot make a series of good decisions without first confronting the brutal facts" (Collins, 2001, p. 70). To determine the merit of an action and what the best subsequent decisions might be, individuals must make meaning of evidence. School improvement experts urge educators to assess their effectiveness continually on the basis of tangible evidence that students are acquiring essential knowledge, skills, and dispositions. Many educational organizations become content with the "nobility of their cause and . . . substitute good intentions for results" (Dufour et al., 2005, p. 21). High-quality CoPs engage in data-driven decision making and "embrace the use of data analysis to shape decisions on a district, area, school, and even classroom

level" (Eason-Watkins, 2005, p. 201). Systematic evaluation of practice is a critical characteristic of high-functioning interpersonal collaboration in any organizational setting.

CoPCAR

The CoPCAR shown in Figure 2 was designed to capture and communicate in a straightforward fashion the six fundamental characteristics of intraorganizational, interpersonal collaboration. Rubrics are designed to establish clear benchmarks for achievement; hence, they compel the clarification of program or project success. Although the language of the CoPCAR is targeted toward school improvement stakeholders, it can be adapted for use by evaluators in any organizational setting.

The CoPCAR presents quality of interpersonal collaboration across a continuum of 1 to 6. The scale is ordinal in nature; the categories represent an inherent order (weaker to stronger), and the numbers assigned to the categories do not indicate an equal magnitude of distance between them. "Professional learning community" is denoted as the strongest and "networking" is denoted as the weakest functioning form of interpersonal collaboration. The CoP characteristics of DDAE are operationalized at three levels of functioning by column. Attributes of high-quality DDAE (derived from the literature review) are listed in each cell of the top row. Because the rubric was intended to frame subsequent evaluation tasks with practitioners, it was important for us to negotiate the tension between the tool's empirical rigor and its accessibility and usefulness. As Sapsford (1999) explains,

> the phrasing [of the rubric] needs to be precise, to ask for exactly the information which is required . . . and at the same time must be as colloquial as possible so as to be easily understood, and to create some feeling for a natural conversation rather than an esoteric checklist. (p. 119)

With clear benchmarks for achievement captured in an accessible and theoretically sound rubric, the likelihood increases that subsequent assessment measures will become more objective, consistent, and valid. It is important to note that the CoPCAR was developed collaboratively. To create the CoPCAR, we used our review of the literature to produce an initial version, which we then distributed to school-based leadership teams within High Schools on the Move for piloting, discussion, and feedback. The draft of the rubric had fewer descriptors in each box and a 4-point scale where 0 = *no collaboration* and 4 = *teaming*. Through several large group discussions that we facilitated, program stakeholders refined the language and scale of the instrument to reflect the criteria for performance that they believed were most important to identify and assess.

Steps and Strategies in the Evaluation of Interpersonal Collaboration

The CoPCAR shown in Figure 2 became the key deliverable and the organizing framework used in the evaluation of school improvement initiatives and is now also being used in the study of government and public agency settings (Koliba & Gajda, 2006). In the remainder of this article, we describe four steps that evaluators can take to (a) increase collaboration literacy among stakeholders, (b) identify and inventory CoPs within the organizational setting, (c) formatively assess the quality and development of CoPs, and (d) determine the correlation between interpersonal collaboration and essential organizational outcomes. We use the framework of the CoPCAR and examples from evaluation work within the school improvement setting to describe each step. However, the approaches are suitable for the evaluation of collaboration within a wide range of organizational contexts.

Figure 2
The Community of Practice: Collaboration Assessment Rubric

		Dialogue	Decision Making	Action	Evaluation
Degree of Collaboration — Professional Learning Community	6	Agenda for group dialogue is preplanned, prioritized, and documented. All group members regularly meet face-to-face. Group dialogue is structured and focused on examining evidence about student work and the effects of teaching practice. Disagreements and controversy exist, are addressed and resolved "now" or as close to "now" as possible. Team members air disagreements publicly inside face-to-face meetings. Shared purpose is regularly invoked and reaffirmed through group dialogue.	All decisions are informed by group dialogue; process for making decisions is transparent and adhered to; group leaders/facilitators are purposefully selected and visible. Group consistently makes decisions about what individual and collective pedagogical actions that they will create, maintain, and change. Decisions are directly related to the cultivation of student learning.	Each member takes action as a result of group decision making. Member actions are interdependent, pedagogically complex/challenging, and directly related to the cultivation of student learning. Balance in member contributions. Even distribution of workload.	Group uses evidence to evaluate pedagogical practices. Group systematically collects quantitative and qualitative information about her/his actions and the effects of her/his practice on student learning; evidence is shared publicly and informs group dialogue and decision making.
	5				
	4	Agenda for group dialogue exists; Most group members regularly meet face-to-face. Process for dialogue tends to be improvisational, but the focus is usually related to making meaning of information related to practice. Disagreements may not exist, be unrecognized, or unresolved. Group will occasionally invoke or reaffirm a shared purpose. Unresolved, latent, ongoing conflict leading to resistance, obstruction and the avoidance of conflict.	Decisions are usually informed by group dialogue; decision-making process may be unstructured and/or lack transparency; group leaders/facilitators exist, but may not be purposefully selected or visible. Group periodically makes decisions about what practices they will create, maintain, and/or change. Decisions are generally related to the cultivation of student learning. Low level decisions.	Each member takes action, but not necessarily as a result of group decision making. Group actions are somewhat coordinated and interdependent; actions may lack pedagogical complexity or challenge, but they are generally related to the cultivation of student learning.	Most members consider the effects of their practice on student learning, but minimal evidence is systematically collected or publicly shared to that effect. Group may rely on "hearsay", "anecdotes!" or "recollections" as evidence to inform dialogue and decision making.
	3				
Network	2	Full attendance at meetings is rare or the group meets face-to-face sporadically. Agenda for group dialogue is not planned; process for dialogue is entirely improvisational. Disagreements do not exist or are unrecognized. Some or most group members are not invested and/or hold disparate conceptions as to the purpose of the group. Destructive controversy. Team members air disagreements privately after the meetings.	A process for making decisions is not transparent or does not exist. Decisions are minimally informed by group dialogue. Group leaders/facilitators are not purposefully chosen or are not visible. Group may make decisions, but they are generally unrelated to pedagogy and the cultivation of student learning. Auxiliary issues.	Individuals take minimal action; actions tend to be uncoordinated or involve very little pedagogical challenge and/or complexity. Actions are tangentially related to the cultivation of student learning and have marginal significance for students related outcomes.	Group members do not regularly collect or share evidence about the merits of their practice and effects of practice on student learning.
	1				

**Step 1: Increase Collaboration Literacy Among Stakeholders**

Regardless of the context, internal or external evaluators of intraorganizational collaboration will likely encounter a need to render a degree of usefulness and common understanding to the term *collaboration* early in the evaluation. It is important that collaboration be defined in such a way that goals of an evaluation can be coconstructed, survey methods can be mutually negotiated, and analysis of findings can be commonly understood. But perhaps more important, stakeholders need a common language for communicating with one another about the imperative of collaboration. Therefore, it will likely be important for evaluators of collaboration in all organizational settings to increase collaboration literacy in at least two ways: conceptually and semantically.

Conceptually. Stakeholders need to understand early in the evaluation that collaboration within a CoP looks and feels much different than the type of collaboration that they might be used to in their traditional organizational context. It is not uncommon for members of organizations to be predisposed to a "chains of command" rather than a "CoPs" way of thinking and doing. For example, practitioners in school-based settings have historically understood schools as rational institutions featuring linear lines of communication, top-down decision making, differentiation of tasks, hierarchical supervision, and formal rules and regulations (Sergiovanni, 1994). Jim Collins (2001) determined that great organizations with the capacity for positive growth were able to distillate "a complex world into a simple organizing idea, a basic principle, or concept that unifies and guides everything" (p. 91). The concept of community is a simple organizing idea that reduces obfuscation and reveals the constellational nature of intraorganizational collaboration. In our work with school improvement stakeholders, we have facilitated study groups and retreats ranging from half a day to a week in which program personnel and practitioners explore the meaning of intraorganizational and interpersonal collaboration. We stimulate the conversation and structure the group dialogue through the use of visual aids and graphic organizers. For example, we have contrasted the concept of organizations as CoPs, as shown in Figure 3, with a depiction of human relationships found in a traditional organizational chart.

Figure 3 is a generic yet typical representation of the CoP constellation that might exist within a 40-member organization. The groups of individuals encircled with dotted lines represent six individual CoPs, and the figures overlapping two circles represent "boundary spanners" who hold membership in more than one CoP and connect CoPs within organizations. CoPs that exist independently, with no boundary spanners or linkages to other CoPs within an organization, are depicted in circles with solid lines, and individuals without membership in any CoP are represented by the people icons standing outside all the circles of the organization. We suggest that the ideal type of organization, whether it be business or nonprofit, is one in which every person is a member of one or more high-functioning CoPs and all intraorganizational CoPs are linked by boundary spanners. Visual aids such as Figure 3 can be used to depict conceptually how this ideal type of intraorganizational CoP constellation has the capacity to establish a dynamic and interconnected web of interpersonal collaboration through cycles of inquiry.

Semantically. Even if evaluation stakeholders conceptually understand collaboration, the term also has to be rendered more useful through precise language. Because collaboration has persisted as an abstract and normative phenomenon, the construct is used to describe a vast array of interpersonal groupings and configurations within the public and private sectors including "team-based organizations," "self-managing teams," "quality circles" (Peters, 1987; Peters & Waterman, 1982), "critical friends groups" (National School Reform Faculty, 2005),

Figure 3
Organizations as Communities of Practice
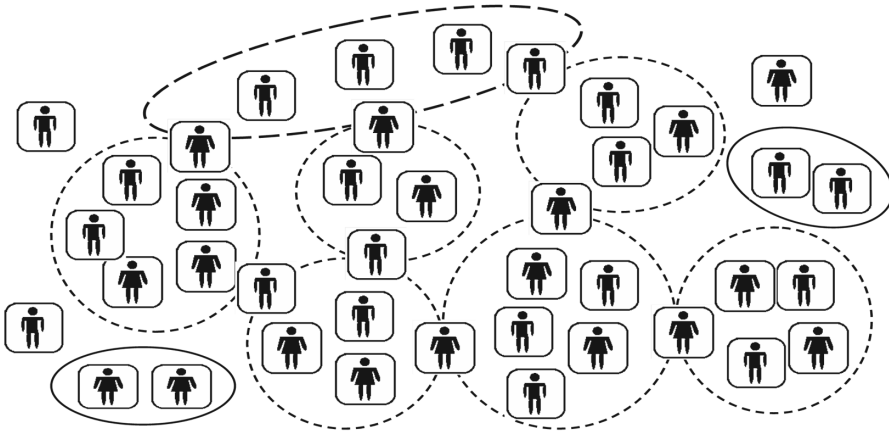
"continuous improvement teams" (Senge, 1999), and "professional communities" (Dufour et al., 2005). In the education and school improvement literature, the terms professional learning communities and CoPs are used interchangeably to signify groups of educators who work together to examine their practice and effects of practice on student learning (Schmoker, 2005). The multitude of nomenclatures used to signify any and all formations of interpersonal collaboration has made it virtually impossible to distinguish between effective and ineffective CoPs, and overuse of the term collaboration jeopardizes its value to organizational improvement stakeholders. As Dufour (2005) points out,

> The idea of improving schools by developing professional learning communities is becoming more and more popular. But people use this term to describe every imaginable combination of individuals with an interest in education—a grade level teaching team, a school committee, a high school department, an entire school district, a state department of education, a national professional organization, and so on. In fact, the term has been used so ubiquitously that it is in danger of losing all meaning. (p. 31)

Through our experiences, we have learned that evaluation stakeholders find it exceptionally helpful to be equipped with precise language and to realize that not all forms of collaboration are created equal. Simply stated, organizational stakeholders need to know that all intraorganizational groups that have formed for some purpose are CoPs, whose members engage in some degree of DDAE, and the professional learning community should be considered the highest functioning form of such collaboration.

The use of graphic organizers, pictorial representations, and verbal explanations to render conceptual and semantic usefulness to the term collaboration can be reinforced with other learning opportunities such as exposure to collaboration-related articles, DVD presentations, or books. In the case of school improvement initiatives, we asked program personnel to select and read key articles related to collaboration from their own professional journals (e.g., *Educational Leadership*, *Educational Administration Quarterly*, *Journal of School Leadership*, *Journal of*

Staff Development, and *Phi Delta Kappan*) prior to attending the workshops that we facilitated. For example, "Of Hubs, Bridges, and Networks," by Douglas Reeves (2006), is a well-written and accessible article that we intend to use as part of our evaluation of the next iteration of the High Schools on the Move Study Group process.

Evaluators working with organizations that seek to rise to the challenge of creating and sustaining professional learning communities will need to increase collaboration literacy among stakeholders. This can be facilitated through a process whereby the term collaboration is rendered useful, both conceptually and semantically, prior to engaging in more formal assessment activities. Evaluators working in business or nonschool settings may want to reference *The Collaboration Challenge*, by James Austin of the Harvard Business School. This book is a compelling and comprehensive read that could generate a common language of collaboration among a range of nonprofit and private organizations. Frey, Lohmeier, Lee, and Tollefson's (2006) recent article, "Measuring Collaboration Among Grant Partners," is a useful reference point for stakeholders of interagency programs, particularly those supported by time-restricted grant funding.

Step 2: Identify and Inventory CoPs

When an organization's members acquire a degree of conceptual and semantic clarity about the nature and characteristics of collaboration, they inevitably become curious about the dynamics of their own practice. Organizational stakeholders start to ask, "Where and to what extent are we a community of practice? What communities of practice am I in? Are they professional learning communities or just networking opportunities? How will I know?" Evaluators can help to answer these important questions by using a process to identify and inventory intraorganizational CoPs. The goal in this step is for the evaluator(s) to establish systematically who is working with whom, the number and type of existing CoPs, and a concrete picture of the CoP constellation that exists within the stakeholder organization. The identification and inventory process can be used to generate a summary of CoP names, the aggregate number of CoPs, and the nature (purpose) of CoPs, as well as to determine the range in CoP membership, extent of CoP formality, and CoP longevity.

To document the current configurations of CoPs, we have asked participants to list specific groups (both formal and informal) to which they belong that have some sort of shared purpose. To centrally record CoP data collected from individual program stakeholders, we have used a Community of Practice Inventory Form similar to the one shown in Figure 4. The administration and components of this form can be adjusted by evaluators to reflect the specific type of information that is sought. For relatively small schools with limited numbers of faculty members, we have asked individuals to list all the CoPs of which they are a part and to aggregate their responses on the CoP Inventory Form. If time or access to faculty members is an issue, we ask the school administrators to list the CoPs and their corresponding characteristics active at their schools. For stakeholders who desire an initial sense of confidentiality about the identification of CoP membership, we distribute copies of the CoP Inventory Form (electronically or in hard copy format), which are returned to us directly for compilation and analysis. Regardless of how the information is collected, the goal is to surface who is working with whom, for what purpose, when, and for how long within an organization. Results can be displayed and reported in several formats. For instance, results can be mapped to illustrate pictorially an organization's CoPs, their membership, boundary spanners, and isolated CoPs and individuals. Numerical reports, such as a comparison of CoP membership by individual compared to average CoP membership per person, can reveal which members of the organization might be over- and underextended in their involvement within the organization.

Figure 4
Community of Practice (CoP) Inventory Form

COMMUNITY OF PRACTICE INVENTORY FORM

District: _____
School: _____
Date: _____

CoP Name	Number & Titles of Members	Purpose of the CoP	Length of Time CoP Has Existed	Is CoP Formally Recognized?	Frequency of Face-to-Face Meetings	Resources Used to Support It	Importance to Core Functions
Etc.							

As an evaluation strategy, the identification of intraorganizational CoPs has proven to be of the utmost value for stakeholders. For one school community, the identification and inventory process brought to light the fact that faculty members were participating in an average of six separate CoPs (total number of CoPs at the school numbered about 160), which is too many to groups belong to and still participate with consistently high quality. Central administration required membership in three—the full faculty meeting, one "specials" team, and one departmental team—whereas the remaining CoPs were established or created by choice. Most faculty members reported the "need to know what was going on" and "to share information about schedules and materials" as their CoP's primary purpose; fewer than 25% of the CoPs were found to be focused on the improvement of student learning. We reported these findings to the school leadership team, who in turn used this knowledge to make decisions about how to restructure the membership of their CoPs. Ultimately, they decided to ask faculty members to become part of one horizontal and one vertical planning team and to focus on the analysis of student work. In addition, subsequent school housekeeping information (due dates for grades, nominations for awards, etc.) was distributed via a newsletter (as opposed to being reviewed at schoolwide faculty meetings), and a significant portion of the full-faculty meeting agenda was allocated to the sharing of specific successes related to student learning.

The identification and mapping process garnered different but equally helpful results at an urban school with a more heterogeneous student population. Findings revealed that a small number of faculty (8 out of 52) were engaged in an average of three CoPs, whereas the remaining faculty members reported that they *never* met face to face with any colleagues (other than those they see at monthly 45-min faculty meetings). The administrative team did not require membership in formal CoPs, nor was attendance at faculty meetings mandatory. The results of the inventory process surprised the school's leadership team; they believed that membership in CoPs would be high and universal because CoP formation would result organically and voluntarily. The leadership team engaged their school faculty in the examination of the identification and inventory data and discussed whether and how to restructure the purpose and process of the schoolwide faculty meetings. Ultimately, they decided that staff attendance would be expected at schoolwide faculty meetings. In addition, membership in one additional CoP (a grade-level team) became required, and release time was negotiated to make time during the workday for this to happen.

Evaluators can help organizational stakeholders use the data generated by the CoP identification and inventory process in Step 2 to make subsequent evidenced-based decisions about how to structure, connect, and support CoPs. Furthermore, this process can be repeated,

providing longitudinal snapshots of intraorganizational CoP membership and the configuration of CoPs over time.

Step 3: Formatively Assess the Quality and Development of CoPs

Once stakeholders identify their CoPs, it becomes important to gauge their relative quality systematically so that program officials can make informed midcourse corrections and allocate targeted resources for their improvement. The collection, analysis, and reporting of quantitative and qualitative data regarding the development of intraorganizational collaboration was a primary task for which we were contracted in our school improvement evaluation work.

To examine interpersonal collaboration at work within a school-based setting, we utilized quantitative and qualitative survey techniques across multiple CoPs within a school community. Our methods were threefold. First, we asked individual CoP members of purposefully selected CoPs (identified through the inventory process in Step 2) to rate the quality of their CoP cycle of inquiry using the CoPCAR found in Figure 3. All individual members of these CoPs were asked to select the number on a scale of 1 to 6 that most closely characterizes the nature of their CoP's DDAE. Scores for individual CoPs were computed by aggregating and then averaging individual member scores. Second, we interviewed purposefully selected CoPs regarding the nature and characteristics of their group DDAE by asking questions that elicited an elaboration of their initial numerical CoPCAR responses. We have used a survey protocol in the formative evaluation of interpersonal collaboration similar to the one shown in Figure 5. The focus group questions are intended to solicit perspectives from the members of individual CoPs about the quality of their cycle of inquiry. The resulting findings are intended to be used by program leaders to develop the quality of intraorganizational collaboration strategically.

All quantitative and qualitative data generated in Step 3 need to be analyzed and then reported in user-friendly formats. Stakeholders can use the descriptive statistical data (generated from the administration of the CoPCAR) along with the qualitative narrative findings (generated from the analysis of focus group interview transcripts) to understand their current level of COP functioning and identify where and how collaboration could be improved.

In the High Schools on the Move initiative, formal CoPs in one school setting—the English, math, science, social studies, and support services departments, as well as the school's site-based management steering committee—completed the CoPCAR and engaged in a 90-min structured focus group interview about their cycle of inquiry. Nonparametric comparisons of self-assessment ratings revealed that the criterion of "evaluation" consistently and universally garnered the lowest score (mean score = 2.1 out of 6.0). Interview transcripts provided narrative confirmation of the numerical ratings and revealed that school-based practitioners were relying almost exclusively on hearsay or informal anecdotes to inform their pedagogical choices. None of the five CoPs in this school setting were using student assessment data to frame their dialogue. These findings prompted school administrators to focus upcoming schoolwide faculty meetings on how to access and use student assessment data to inform decision making.

In the Teaching All Secondary Students initiative, findings generated from formative assessment of collaboration indicated that practitioners were not engaging in high-quality dialogue. CoP discussions tended to be conversational and improvisational, rather than focused on a common purpose and guided by purpose and a particular process. These particular evaluation results prompted the Higher Education Collaborative and Teaching All Secondary Students instructors to scaffold practitioner learning with direct instruction on the dialogue protocols put forth by the National School Reform Faculty.

Figure 5
Community of Practice (CoP): Focus Group Interview Protocol

COMMUNITY OF PRACTICE–FOCUS GROUP INTERVIEW PROTOCOL

Organization/School: _____

Community of Practice: _____

Date: _____

Focus Group Participants: _____

FG Facilitator(s): _____

Intro Questions:
- Please share your name and how you came to be a member of this CoP.
- Are there other members of this CoP who are not present at this time?
- What might this CoP be called? How is it referred to by its members?
- What is the central purpose of this group?

In terms of **dialogue/communication …**
- What do you talk about?
- How often do you convene for dialogue?
- How is your dialogue structured/facilitated?
- Describe the interpersonal dynamics of the group. (Probe for level of interpersonal trust and problem solving.)
- What conflicts exist or have been worked through in this CoP?
- How might your dialogue be improved?

In terms of **decision making …**
- To what extent does your group make decisions?
- What types of decisions do you typically make?
- What is your process for making decisions? (consensus, majority, one person, etc.)
- Do you have a group leader or leaders?
- Who is/are your group leaders?
- How might your decision making be improved?

In terms of **action taking …**
- What types of actions result the types of decisions that you from make?
- What individual actions are taken?
- What group actions are taken?
- How might your action taking be improved?

In terms of **evaluation …**
- What types of information do you gather?
- What type of evidence informs your dialogue and decision making?
- How do you determine whether and to what extent the actions you take are effective?
- How might your evaluation be improved?

Closing Questions:
- What accomplishments is this group most proud of?
- Is there anything that we haven't talked about here today that you believe is important to add?

We have learned through our own experience that when the findings generated by the survey and interview processes described in Step 3 are shared with individual CoP members and

administrators in an accessible fashion, organizational leaders are enabled to make timely and useful midcourse corrections related to the structure and dynamics of their CoPs. Large and nonschool-based organizational settings could benefit from a formative assessment of their CoPs as well. Internal evaluators in private business settings, for example, could engage the members of their marketing, sales, accounting, and benefits departments in an examination of the quality of their cycle of inquiry and use the findings to target improvements in organizational dynamics. We have extended our own research into government agency settings and have begun to document how public administrators work across departmental lines and sectors to accomplish their goals (Koliba & Gajda, 2006). We also believe that the CoP can serve as an important unit of analysis in assessing public–private partnerships, cross-sector collaboration, and other forms of network governance.

The CoPCAR-based survey and interview processes can be adapted for use in a wide range of organizational settings and evaluation contexts; however, it is important to keep in mind that the key to validity at every stage of survey work is standardization. Evaluators will need to make sure that measurements are taken and questions are asked in the same way for every member of a CoP. As Sapsford (1999) makes clear, "standardization lies at the heart of survey research . . . the whole point is to get consistent answers to consistent questions" (pp. 4-5). In our school-based evaluation work, the point was to ask consistent questions in a standardized format about the nature and quality of collaboration in school-based CoPs. This goal of asking consistent questions in a standardized format would remain the same irrespective of the setting in which the evaluation of collaboration takes place.

Step 4: Analyze the Outcomes (Summative Assessment)

Because interpersonal collaboration has been an underoperationalized construct in the fields of evaluation and organization learning, there are relatively few empirical studies that explore the relationship between quality of collaboration and organizational outcomes. As O'Donnell et al. (2003) attests,

> Further research needs to focus on identifying processes, behaviors, values, norms, rituals, stories, and motivations that distinguish high performance CoPs from poor ones. . . . An initial starting-point for such comparisons would be the distinction between CoPs that have high output of intellectual capital from those that do not. (p. 117)

In the school improvement literature, student achievement scores, teacher retention, measures of school safety and climate, and other variables related to essential school outcomes have not yet been consistently correlated with collaboration, although in our evaluation context we have seen some emerging evidence to suggest that such a correlation exists. A school district affiliated with Teaching All Secondary Students that targeted the bulk of its professional development resources on the cultivation of collaboration has experienced significant positive organizational outcomes. Student academic performance scores on the New Standards Reference Exam increased each year in nearly all categories following the school's restructuring into professional learning communities, and after 4 years, the dropout rate decreased 4% to 2.1%, the lowest in the state. However, the correlation between collaboration and organizational outcomes has not yet been empirically studied in this case, and historical and other intervening variables have not been ruled out. We believe there is great potential for evaluators to make a significant contribution to the field of organizational development by designing utilization-focused studies that examine the correlation between CoP quality and development and the attainment of essential organizational outcomes in educational and other nonprofit and business settings.

Summary

The evaluation field has a unique responsibility and role to play in helping organizational improvement stakeholders meet contemporary reform challenges that champion collaboration as the vehicle to achieving essential organizational outcomes. Applying this assertion to school settings, we have explored how contemporary school reform efforts call for a radical shift from the predominant view of schools as bureaucratic and hierarchically ordered organizations to that of schools as CoPs. To reach essential prekindergarten through Grade 12 outcomes, such as a healthy school climate and increased student performance, educators are being called on to examine and improve their capacity to capitalize on the power of interpersonal collaboration. Through our consultation work with comprehensive school renewal initiatives, we have learned a great deal about what program stakeholders want and need to know in relation to the development of collaboration and what evaluation steps and strategies are highly useful for program improvement.

In this article, we recommend a four-step process that has proven to be beneficial in the evaluation of initiatives that seek to "do" collaboration and "be" collaborative. Six fundamental characteristics of interpersonal collaboration (purpose, cycle of inquiry, and DDAE) were elucidated and used to frame these steps. We suggest that evaluators of collaboration in any organizational context start by facilitating a process whereby collaboration literacy is increased among stakeholders. Evaluators can render the term conceptually accessible and semantically clear by displaying and discussing pictorial representations of CoPs and the cycle of inquiry. This can be done through a combination of direct instruction about terminology and the use of purposefully selected readings that provide the basis of discussion. Second, organizational stakeholders benefit from an identification and inventory of their existing CoPs. Evaluators can help members of the organization see their CoPs, who is working with whom, and for what purpose. In the third step, the quality of CoPs is examined. We have used a survey and interview process in which a scoring rubric (the CoPCAR) and interview protocol are aligned and used to probe the nature of a CoP's DDAE. Last, we recommend that evaluators work collaboratively with program stakeholders to develop research designs in which the relationship between quality of interpersonal collaboration and essential organizational outcomes is empirically determined.

We recognize that it will not always be possible for evaluators to have unencumbered access to program stakeholders, nor will an adequate level of resources consistently be made available to support widespread interviewing and survey administration. In such cases, it will be important to sample CoPs randomly or representatively (depending on the intended use and users of the evaluation) and to reduce or eliminate the number of CoP focus group interviews that are conducted. When narrowing the sample, it will be important to choose those that are recognized as key leverage points within the organization. In other words, evaluators and program stakeholders should focus their efforts on CoPs that are responsible for key organizational decisions and closer to the core purpose of the organization. However, even if enough monetary and human resources are allocated to support all four steps being fully carried out, an organization's members may simply not be predisposed to airing their interpersonal laundry. When barriers to the evaluation of collaboration present themselves, evaluators should be open to modifying the duration of the steps and the types of strategies that they use. In our evaluation work, most school settings were able to move through Steps 1 and 2 in a matter of weeks, whereas in one school setting with a long history of resistance to change and outside intervention, it necessarily required more time to increase collaboration literacy and to get an accurate picture of CoPs in the organization. Evaluation plans should be flexible enough to allow each step to be carried out with fidelity before proceeding to the next.

A word of caution is also needed regarding the use of data of this nature. Our own experiences highlight the tensions that may arise when data regarding an organization's collaborative capacities are surfaced. Obstructive leaders, participants with axes to grind, and skepticism regarding the efficacy of the process can arise. Being clear about expectations and possible outcomes is a critical element of early negotiations. Being open about the role that feedback plays within collaborative undertaking is essential. Doing one's best to assure the confidentiality of specific criticisms and engaging in member checking are very important features in the building of rapport between the evaluator and practitioners.

Regardless of how large or small the organizational setting is, evaluators can go a long way toward supporting an organizations' collaboration agenda by modeling high-quality DDAE in their own practice. In our evaluation context, we have been cognizant of the need to model the cycle of inquiry and the characteristics of a professional learning community in our work with stakeholders. Nearly all of our meetings with school improvement officials have included an agenda for the discussion and a structure for dialogue. We have utilized feedback from stakeholders about their experiences with the evaluation process to make decisions about what to modify, maintain, or eliminate in our own practice. We believe that our collaborative evaluation efforts have increased the validity and usefulness of the evaluation processes and findings. By being highly responsive, available, and transparent with program stakeholders, we were able to prevent common conditions that can distort rubric survey scoring, such as central tendency bias (e.g., respondents did not avoid selecting high or low CoPCAR scores) and social desirability bias (e.g., stakeholders did not generally select scores that portrayed them in a more favorable light). Furthermore, and perhaps most important, school improvement stakeholders involved in the evaluation have consistently used the findings to make timely, informed, and important midcourse corrections and improvements to their initiatives. We encourage evaluators to make personal meaning and practical use of the theory, steps, and strategies described in this article within their own programmatic contexts. Such efforts can go a long way toward helping stakeholders in a wide range of organizational settings to understand, examine, and capitalize on the power of interpersonal collaboration.

Note

1. For more information about the nature and characteristics of interorganizational collaboration and an approach to evaluating the quality of strategic alliances, see Gajda (2004).

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