Moving the center of expertise: Applying a communities of practice framework to understand coaching in urban school reform

Anysia Mayer · Sarah Woulfin · Larisa Warhol

Abstract Intermediary organizations' coaches are utilized to support and develop principals and teachers as they seek to bring about substantive school improvement. This study presents a qualitative case study of one coach engaged as an intermediary of a school reform organization, the Together Initiative (TI). To investigate how this coach enacted TI reform, we utilized a communities of practice framework and found that although coaches were initially viewed as the leaders of the reform effort, it was actually the teachers who enacted key aspects of the reform. We also surfaced the coach's critical role in helping staff come to understand that they were capable of instituting new practices. This paper provides new perspectives on the complexity of the coaching role in supporting organizational change in urban schools.

Keywords Coaching · School improvement · Implementation · Urban schools · Communities of practice

Although accountability policies and standards-based reform practices have become institutionalized, districts and schools continue to attempt to identify and employ levers for instructional improvement (Datnow et al. 2002; Holme and Rangel 2012). Recent efforts to improve consistently low-performing schools point to coaches as one promising lever (Calkins et al. 2007). Coaching provided by outside experts such as intermediary organizations has been utilized as a strategy for enhancing organizational effectiveness and improving instructional quality in districts (e.g., New York Community District #2, San Diego, and Boston) as well as in

A. Mayer (✉) · S. Woulfin · L. Warhol
Neag School of Education, 249 Glenbrook Road, Storrs, CT 06269-3093, USA
e-mail: Anysia.mayer@uconn.edu

S. Woulfin
e-mail: sarah.woulfin@uconn.edu

L. Warhol
e-mail: larisa.warhol@uconn.edu

comprehensive school reform (CSR) models, including the Accelerated Schools Project and the ATLAS Communities Project (Elmore and Burney 1997; Neufeld and Roper 2002). Indeed, research shows that school-based coaches have been deployed in growing numbers to support principals and teachers as they learn and adopt new practices in an effort to create more effective schools (Bean et al. 2003; Borman et al. 2004; Matsumura et al. 2010). By studying coaches' role in implementation, we can advance our understanding of school improvement activities, teacher practices, and the myriad challenges that educators face (Coburn and Woulfin 2012).

This paper presents a qualitative study of the work of a coach who engaged as an intermediary for a comprehensive school reform model, the Together Initiative (TI). Designed and implemented by stakeholders in a northeastern state, TI was designed to facilitate organizational change and improvement. This reform model deployed coaches to guide specific school improvement activities—ranging from creating a governance structure to analyzing achievement data—alongside school administrators, teachers, and parents. Coaches were key actors, yet their work was dependent on the engagement of teachers (Coburn and Woulfin 2012).

While there is a growing body of research on the roles of intermediary and external assistance agencies in school and district reform (McLaughlin 2006; Malen and Rice 2004), few studies have looked specifically at the implementation strategies in which coaches engage while executing a comprehensive school reform model for an extended period of time. While other findings from the broader study are being reported elsewhere (Mayer et al. 2013), this particular piece focuses on a coach as she engaged with school communities to implement TI's policies and practices (Coburn 2005; Honig 2004; McLaughlin 2006). Specifically, we focus here on one coach as she engaged with two school communities to implement TI's policies and practices. In so doing, we bring together the bodies of literature on coaching and the role of intermediary organizations in school reform to uncover how coaches—as agents of these intermediary organizations—enact an adaptive comprehensive reform model. As a result, this research contributes to two important bodies of literature and deepens our understanding of the ground-level implementation of CSR policies.

Literature review

Synthesizing the extant research on coaches can be challenging because they have different roles across settings and may work to influence different kinds of professional learning and practice (Kampa-Kokesch and Anderson 2001). Moreover, researchers use the term "coach" to describe a range of roles played by individuals working on organizational improvement (Coburn and Woulfin 2012; Grant et al. 2010). Most of the research on coaches has examined those who focus on instructional strategies in specific content areas like mathematics or literacy (Bean et al. 2003; Matsumura et al. 2010; Neufeld and Roper 2003). The coaching literature has explored factors that impact the nature of coaches' work, such as availability of one-on-one meetings, in-class work, planning, and teacher–coach

interactions (Neufeld and Roper 2003; Poglinco et al. 2003; Richard 2003). Other research reports on the challenges faced by coaches, including the lack of a clearly specified role, misunderstandings among school staff about what their role is or should be, and additional responsibilities outside the purview of the coaches' defined role (Marsh et al. 2005; Neufeld and Roper 2003; Poglinco et al. 2003; Richard 2003).

Research in K-12 education has shown that several factors influence coaches' practices and responsibilities, including principals' and teachers' attitudes towards professional learning, the degree of self-awareness of those in the coaching relationship, the protocols and practices involved, the knowledge and skills of the coach, the larger school or district reform model, and the external support and professional development provided to coaches (Coburn and Woulfin 2012; Creasy and Paterson 2005; CUREE 2005; Guiney 2001; Krasnoff 2008; Neufeld and Roper 2002, 2003; Rust and Freidus 2001). It is important to understand how working for an intermediary organization may shape the practices of coaches, and McLaughlin (2006) has contributed to this understanding by explicating that intermediary organizations function as the "strategic middle" (p. 220) between the top and bottom of the system. She emphasized that intermediary organizations can be bridges between new knowledge and practice, and noted that they oftentimes bring in additional tools and resources to build on the strengths of schools. Mitra (2009) suggested that intermediary organizations are better suited as long-term partners, rather than as short-term participants in implementation, because this enables them to build alliances at multiple levels of the education system.

Recent research suggests that instructional coaching can increase student achievement. However, this research does not surface the mechanisms by which coaching mediates student achievement (Coburn and Woulfin 2012; Matsumura et al. 2010). Overall, more research is needed on the mechanisms by which coaching influences classroom practice. Nevertheless, Feldman and Tung's (2001) study on change coaches positions them as collaborators and facilitators for long-term learning and change:

> Through modeling and creating a collaborative school culture with faculties, coaches built capacity for schools to work on reform in a sustainable way. By gaining partial insider status, balancing sensitivity to school context and faculty readiness with moving the reform agenda forward, and working collaboratively on decision making, coaches helped to ensure that changes would be sustainable (p. 33).

Theoretical framework

During the reform process, school leaders are continually challenged to understand how staff acquire and transfer knowledge in order to facilitate organizational change (Ichijo and Nonaka 2006). The communities of practice conceptual framework is a popular approach for addressing this issue in complex organizations (Yang et al. 2009) because it manages the human and social aspects of knowledge creation and

dissemination while improving human performance (Lave and Wenger 1991; Wenger 1998). Communities of practice also serve to foster the generation and dissemination of tacit knowledge that is hard to communicate because it is likely intuitive and embedded in a particular context (Nonaka 1994).

In the field of education, the communities of practice framework has been instrumental in advancing our understanding of how collaborative interactions in teachers' professional development lead to organizational learning and change (Barab et al. 2002; Coburn and Stein 2006; Levinson and Brantmeier 2006). As Levinson and Brantmeier (2006) noted, "because they involve the co-production of identity, communities of practice anchor learning in enduring structures of the self" (p. 325). The framework shifts attention from individual learning to the learning of the group and, in particular, to the outcomes of their collaborative interactions (Hubbard et al. 2006; Stein et al. 1998). This means that the framework highlights how groups of educators work and, ultimately, develop new practices together.

The concept of comprehensive school reform has received considerable attention in the education policy implementation literature (Datnow et al. 2003; Rowan et al. 2009), and researchers have addressed the effectiveness and implementation of various CSR models (see Rowan et al. 2009; Desimone 2002; Datnow 2006). These studies suggest the process of putting a policy or program into action in a particular school context is both complex and difficult (Rowan et al. 2009). Factors such as teachers' beliefs about students, understandings of the reform, and their ability to enact new strategies all impact the level of model implementation (Borman et al. 2004). In addition, support mechanisms, such as coaching, leadership, and professional learning opportunities, are central to program implementation (Datnow 2006; Wood 2007). Researchers seem to agree unequivocally that the fidelity of CSR implementation is closely linked to program outcomes (McLaughlin 2006). Together, this literature demonstrates that school reform is both constructed and executed by those working on the ground in schools and that schools become more effective when all educators learn and adopt the new practices espoused by the reform model (Sleeter 2003; Yanow 2000).

Aligned with ideas from socio-cultural learning theory, communities of practice theory is grounded in Vygotsty's (1978) notion that learning does not just occur through the acquisition of knowledge but rather through social practice and engagement with others in particular social and cultural contexts. According to Wenger (1998), a community of practice "is a matter of sustaining enough mutual engagement in an enterprise together to share some significant learning." We focus here on three key components of communities of practice conceptualized by Wenger: joint enterprise, mutual engagement, and legitimate peripheral participation.

First, actors engage in a *joint enterprise* around specific tasks. This element of the framework highlights how certain forms of work are inherently collaborative, requiring the involvement and input of multiple organizational actors. For example, it is necessary for administrators, coaches, and teachers to meet together to carry out goal-setting activities for school improvement. Researchers can focus on how

actors' joint work has the potential to facilitate learning and organizational change. Second, actors continually negotiate elements of these tasks during *mutual engagement*. This strand of the framework attends to the formation of norms and collaborative relationships, which serve to create ties amongst group members. Furthermore, this strand encourages researchers to analyze precisely how individuals in groups are working together. For example, a coach might work to develop informal connections with teachers in order to build trusting relationships. This could be accomplished by actively listening during introductory conversations with teachers, finding common interests to demonstrate compatibility, or engaging in other observable behaviors that develop trust and ties.

Third, experts within the community of practice develop *legitimate peripheral participation* by strategically engaging with other actors to encourage them to serve as experts (Lave and Wenger 1991). This branch of the framework attends to the ways in which leaders may distribute power and expertise to other actors within an organization (Spillane et al. 2004). In this way, the framework encourages scholars to consider the relationship between insiders and outsiders during implementation. For instance, a coach could delegate particular leadership activities to teachers, such as facilitating a staff meeting, in order to build upon teachers' expertise at a particular grade level (Palincsar et al. 1998).

Some scholars cite limitations of the communities of practice model, noting that it does not address potential institutional and structural inequities that may impede the enactment of new practices and that it lacks an emphasis on individual dispositions or cognitive learning styles (Levinson and Brantmeier 2006; Watson 1998). For instance, in comparison to sense-making theory, the communities of practice framework devotes less attention to how individuals come to understand ideas in the environment (Spillane et al. 2002).

While other CSR research has utilized the communities of practice model to explore the role of third-party organizations in general (Honig and Ikemoto 2008), the current research hones in on the actors within intermediary organizations—specifically, the coaches. It is apparent that coaches often do the primary work of these organizations, so it follows that the reform model's implementation depends upon their ability to utilize and provide teachers with particular resources in order to facilitate their learning and ultimately create more effective schools (Pugach 1999; Supovitz 2002). The coaches are considered to be the reform model's experts and are charged with working collaboratively with diverse actors in their schools. But for authentic learning and change to take place, they must contribute their expertise related to the reform so that the school community as a whole can efficaciously engage in the reform model's work in the ways set out in the research on communities of practice (Maynard 2001; Tansly and Cohen 2001). With these ideas in mind, this study explored the following questions: What was the role of the coach in implementing the Together Initiative? How did one coach enact the TI reform model in two urban elementary schools? How are elements of the communities of practice framework reflected in that coach's reform work?

Research design and methods

To answer these key questions about coaching practices in the TI reform efforts, we conducted a qualitative case study of one TI coach, Esther (For more comprehensive information about the TI and its schools, see: Mayer et al. 2013). Specifically, this is a case study of how one coach engaged in reform activities with various actors within two of the TI's elementary schools. The case study approach allowed us to document the coach's work in TI schools (Merriam 1998; Yin 1994) and, given the multifaceted nature of the TI, it enabled us to concentrate on the complex phenomenon of coaching through the details and meanings of experiences of the study participants.

After preliminary data collection, including interviews with district and school leaders and observations of coaches' meetings, we purposively sampled Esther because her coaching activities were representative of most of the four TI coaches' work. Esther was a white woman who had formerly been an assistant superintendent in a southeastern state and an Accelerated Schools coach. This case study focuses on her work in two TI schools—Oak Street and Pine Ridge—and the processes she undertook as she implemented the TI reform. Esther's two schools are representative of the eight TI pilot schools in terms of student and teacher demographics and academic achievement (See Table 1 for school data). We focused this inquiry on the work of the coach from her own perspective and the perspectives of school staff. While contextual factors are mentioned throughout the article as appropriate, our focus here is primarily on Esther's enactment of her coaching role, rather than on the role of context in shaping her coaching.

History of the together initiative

The state-level CSR model explored in this study, the Together Initiative, was developed in 2007 and was modeled after the Accelerated Schools program. The initiative began with an alliance of key education stakeholders in a northeastern state (including representatives of teachers' unions, administrators' professional organizations, legislators, and a public research university). Founding members of the TI alliance cited Boston Pilot Schools and the Accelerated Schools Plus project (Levin 1998) as inspirational models (Public Statement, March 2007). According to alliance participants, members of the group were frustrated with district leaders' lack of significant progress in closing the achievement gap in the state's urban schools. They believed they were well positioned to identify research-based practices that had worked in other urban contexts and to create state policy to facilitate implementation of their plan. To this end, state legislators who were part of the alliance included authorization for TI as a school turnaround model and allocated funding in this legislation. In 2007, the TI program was signed into law as part of a statewide urban reform policy. Early in the planning stages the alliance envisioned the initiative would be funded at $5 million, but due to budget constraints in the state, it was ultimately funded at $500,000. Subsequently, each member of the alliance agreed to support the initiative according to their role and capacity and they collectively operated as the executive board for the TI, monitoring

Table 1 Data for sample TI schools

School	Type of school	# of students	% Minority students	% Title 1	% Minority staff	District autonomy
Pine ridge	PK-8	433	99.8	78	19.6	No
Oak street	PK-5	824	94.5	>95	26.7	Yes

the implementation process. In 2007, the alliance, now acting as an intermediary organization, appointed a full-time executive director, a former Accelerated Schools executive, to direct the day-to-day operations of TI.

TI was conceived as a 5-year initiative. The alliance relied exclusively on state funding and was officially launched in the fall of 2008 in eight elementary/middle schools in five urban districts. The superintendents of the five districts were invited by the executive director of the intermediary organization to participate in TI, and each nominated one elementary school principal in his or her district to participate. After meeting with the TI executive director, these principals then independently completed a brief application that subsequently served as a memorandum of understanding throughout the implementation process. In these applications, principals included their rationales for wanting to join TI and described how they thought TI might benefit their schools. The alliance required that at least 90 % of teachers in each school vote in favor of participation in order to adopt TI. Subsequently, all of the schools that applied were allowed to adopt the TI model.

Using the Accelerated Schools Plus as a model, the executive director hired four female educational professionals (former teachers, principals, and district administrators) from midwestern and southeastern states who were familiar with Accelerated Schools Plus to facilitate the implementation of TI in the eight schools. The daily work of these coaches was guided primarily by their earlier coaching experiences in schools across the country. They met with the executive director once every 3 months as a group to discuss their work. During the first 3 years of implementation, the coaches were the only representatives of the TI alliance to visit the school sites. As a result, these professional coaches served as the linchpin of the model and the nexus of communication for all the different stakeholders, from parents, teachers, and district superintendents to the executive director and alliance members.

The TI model

Following the foundational school reform principles of the Accelerated Schools Plus model, the TI model followed the philosophy of "indigenous intervention" (Heckman and Montera 2009). In particular, it outlined process goals (e.g., "schools will increase teacher involvement in governance") but did not specify any particular curricular interventions. Its theory of action (Argyris 1993) was that in order to effect lasting change in the beliefs and behaviors of teachers, principals, parents,

and students in a school, these stakeholders must actively choose, design, and implement changes to the school.

Similar to the Accelerated Schools model, the TI model relied exclusively on coaches to do the work for the intermediary organization by facilitating the implementation process in the schools. The coaches were introduced to the principals as the experts in the model, and this placed them in a position where they were integral to the reform process. As employees of the intermediary organization, the coaches held no positional authority in the schools. Each coach was responsible for developing an effective relationship with the principal and other key leaders; engaging the faculty, staff, students and wider community in identifying a school vision; developing a participatory school leadership team to steward the school-wide improvement efforts; and working with teachers and staff to identify high quality learning and teaching strategies. Because they were representatives of an external organization, they provided a valuable external perspective on the school context.

TI coaches initially met one-on-one with school principals to develop relationships, create action plans, and carve out time for the coaches to meet with teachers during the school day. The principals and the coaches themselves determined the nature of the relationships between the coaches and the staff. Because they hoped the TI model would help their schools close the achievement gap, principals, for the most part, welcomed the coaches into their schools and saw them as allies and peers. The Accelerated Plus model states that the coaches should begin implementing the model by engaging staff in a cycle of inquiry and improvement, and coaches guided school staff through a range of benchmarks during the first 2 years of TI: buy-in, visioning, setting priorities, setting-up shared governance structures, creating ongoing inquiry teams, and creating action plans to guide instructional improvements (see Table 2) (Christenson 1996; McLaughlin and Talbert 2001). This process aimed to help internal stakeholders and external organizations track each school's progress.

School context

Each of the two schools featured in this paper was located in a mid-sized urban school district that was struggling to meet NCLB requirements for Adequate Yearly Progress (AYP). Both districts were serving large numbers of English learners (approximately 35 % of the students as a whole); over 90 % of the students in these districts were African American or Latino, and a majority qualified for federal funding for free or reduced price meals. In contrast, the majority of the teachers in these districts were white. In 2007, the superintendents in this northeastern state's urban districts were under a great deal of pressure from the state department of education to improve their students' scores on standardized tests (Schoen and Fusarelli 2008).

Oak Street is a PK-5 school with roughly 850 students. As of 2008, Oak Street had not met AYP benchmarks for 5 years. Oak Street had a large percentage of veteran teachers; over 80 % had been at the school for over 20 years. The school was led by a veteran principal who embraced the distributed leadership model of TI.

Table 2 Together initiative benchmarks (modified from Accelerated Schools Plus)

Step	Action	Time Frame	Details
1	Buy-in	First 1–3 months	Prior to the coach visiting the school, the community, both certified and classified staff, must commit to the process, with a minimum commitment level of 90 %
2	Taking stock	First 3–6 months	The coach helps staff create teams that will "take stock" of their organization by collecting and analyzing four types of data (perceptual, school processes, demographic, and student achievement)
3	Visioning	First 3–6 months	The coach facilitates the creation of a school-wide vision statement that involves input from all stakeholders in the community
			The staff holds a vision celebration for the school community upon completion of this step in the process
4	Setting priorities	Starts end of year 1/beginning of year 2	The coach facilitates sessions where school staff compare the "taking stock" data with the school vision to prioritize the top 3–5 challenge areas that, when addressed, will help the school move towards its vision
5	Creating governance structure	Starts end of year 1/beginning of year 2	The coach works with the principal, teachers, and community members to institute shared governance structures that replace the traditional administrator led leadership teams. The governance structure includes three tiers: Steering Committee, Inquiry Teams, and community as a whole
6	Beginning inquiry	Starts beginning of year 2; used throughout process	The coach helps organize stakeholders from the entire school community into inquiry teams through a self-selection process. Inquiry teams begin their work as small groups using a professional learning community (PLC) model. These PLCs collaborate to create action plans that address their challenges. The coach facilitates a school-wide meeting where staff discuss which action plans to implement in year three
7	Continuation of work on instruction	Starts end of year 1/beginning of year 2	The coach monitors the development of an environment of shared governance. If shared governance appears to be working, then a coach may suggest that schools use one of a variety of ways to continue to develop strategies for curricular innovation. At this point, coaches develop a collaborative plan with the governance teams specific to the needs of the school
8	Reflection and assessment	Ongoing	Generally, coaches help staff plan some type of reflection and celebration at the end of year one and the end of each subsequent year

When the school voted to adopt the model, the superintendent allowed Oak Street a high degree of autonomy from the district because he was in the second year of implementing a portfolio management model across all of the schools in the district (Bulkley 2010). For instance, the school had freedom from district curricular mandates. In addition, school leaders were able to modify the school's daily schedule to dedicate time for working on the TI process.

Pine Ridge is a PK-8 school with approximately 450 students. The school had not met AYP benchmarks for 8 years. Pine Ridge was not granted the same level of autonomy from the district that Oak Street enjoyed. This district adhered to a traditional district management model where all schools followed the same district-led interventions. In fact, while attending a school-wide TI meeting, the assistant principal shared a two-page list of district initiatives—beyond the TI work—with which the school was required to comply (Fieldnotes, November 3, 2009). The principal at Pine Ridge was new to the school and had less leadership experience than Oak Street's principal. Pine Ridge also had a history of high teacher turnover; their teaching staff was largely made up of new teachers with fewer than 5 years of experience.

Data collection and analysis

A team of four university researchers, all white females, collected data over a 3-year period (2008–2011). For the broader case study analyses, we collected data in eight pilot TI schools. Cumulatively, we collected over 200 in-depth semi-structured interviews and approximately 150 h of observations. The case study described in this article is based on data from 60 interviews and 40 h of participant observation. Specifically, we conducted interviews with Esther, as well as school faculty, community members, and district administrators, including the superintendent and assistant superintendent. Our interviews explored the current context of comprehensive school reform, education policy issues, and specific questions about the TI model and reform activities. To learn about Esther's work, we conducted three formal interviews with her over 2 years, plus informal interviews during quarterly TI coaches meetings. In addition, we shadowed Esther as she worked with school staff.

We conducted extensive participant observations so that the school community would be familiar with the project and the research team. These observations were conducted in teacher meetings, classrooms, school events, and district meetings. In addition, we collected documents, including the official state and district level policies, the school's current and past curricula, and reports on relevant achievement data.

We followed Miles and Huberman's (1994) procedures for analyzing qualitative data. These procedures included systematically coding interview transcripts and observation data, creating data displays, and drawing and verifying conclusions. Aiming to systematically analyze data, we applied deductive and inductive codes to the interview data. The deductive codes were grounded in the communities of practice and school reform literatures, while the inductive codes related to emergent categories identified by the researchers. To systematically review and analyze data, we used Dedoose, a web based software program.

The first round of coding involved examining the interview data for: the coach's role; the coach's work activities; teachers' perceptions about TI; and teachers' roles in decision making. We then conducted pattern coding (Miles and Huberman 1994) by grouping coded data into smaller sets of recurrent and emergent themes. The themes that emerged from the data looked similar to professional behaviors described in the communities of practice research. Following these analyses, we applied deductive codes based upon the communities of practice framework—for instance, we systematically coded instances of joint work. We also wrote memos regarding the coded instances of joint work, mutual engagement, and legitimizing peripheral participation. Throughout this process, we provided vital checks on each other's interpretations. Our final conclusions were drawn and verified throughout the data reduction and analysis process (Strauss and Corbin 1990).

Findings

The premise of the TI initiative as a mechanism for organizational change and the nature of each coach's work hinged on sustained interactions between the coach and the school community. Thus, when we viewed the enactment of this comprehensive school reform model through a communities of practice lens, the focus became understanding the *processes* by which each coach engaged with teachers, administrators, and parents. With this in mind, we present findings on one external reform coach's work to illustrate three dimensions of communities of practice: joint work, mutual engagement, and legitimizing peripheral participation (Cobb et al. 2003).

In each section, we describe the TI model benchmark the coach was seeking to introduce to the school (see Table 3), and then explain Esther's and the school staff's perspective on the process and strategies she utilized. Throughout the following sections, we argue that the processes utilized by Esther are evidence that she understood that learning does not just occur through the direct acquisition of knowledge, but through social practice and engagement with others in social contexts. By using the communities of practice lens to examine this coach's work within TI schools, we gain a novel understanding of how coaches and teachers collaborate and learn new practices during the implementation of comprehensive school reform models. Using theory to ground our analyses of the work of one coach from an intermediary organization enables us to generalize our findings to coaching in other reform contexts. Finally, we conclude that the processes utilized by this coach should become a new archetype for introducing school reforms to educators.

Joint enterprise: Introducing reform by engaging school communities

Overview of the process

The TI model structured the coach's work during the initial phase of implementing benchmarks, which were a modified version of those used in the Accelerated Schools Plus program (Levin 1998). The Accelerated model assumes that teachers

Table 3 Summary of findings aligned with three dimensions of communities of practice framework

	Intermediary organization's strategy	Coach's strategy
Joint enterprise	School staff created shared governance structures	Esther viewed staff as learners who must take part in directing her work at each stage
Mutual engagement	School staff worked in professional learning communities to improve classroom instruction and school culture	Esther taught and modeled collaborative techniques. She acted as a process observer to ensure groups were working collaboratively
Legitimate peripheral participation	School staff took responsibility for creating and implementing action plans based on inquiry work done in professional learning communities	Esther stepped back and allowed the teachers to lead the committee work. She encouraged teachers' ideas but refused to tell them what to do

need to be empowered in order to make changes they think will improve teaching and learning in their particular context. In Levin's (1998) own words: "the empowerment process is guided by the view that, if the school can undertake its own process of democratic decision-making by staff, parents, and students, it will be able to transform its own culture" (p. 8). Thus, the TI reform model required the voluntary and active participation of a variety of stakeholders to engage in the process of the reform.

According to documents describing the model, coaches were to initially lead this empowerment process and introduce each school community to the reform process. The first steps were for all staff to adopt a shared vision for the school and to set up shared governance structures. After these preliminary steps, the coach was to facilitate teacher-led collaborative planning teams that would engage in the inquiry process around the needs of the students, create research based action plans to address the issues, and implement new practices (McLaughlin and Talbert 2001; Levin 1998). We found Esther's work in her schools proceeded as described in TI documentation.

Esther orchestrated opportunities to engage all educators in facilitating the initial steps. While she initially was the only expert, imparting her knowledge of the reform model was less important than following a process of working jointly from the beginning. Esther believed that this was the only way to foster lasting changes in staff members' practices and their fidelity to their implementation of the reform model. Thus, our analysis reveals this as an example of the communities of practice process known as joint enterprise; Esther's view of the work of implementing the reform model was, by definition, "joint."

During the first year of implementation, Esther facilitated several types of meetings in order to develop stakeholders' common understandings of TI and to promote the enactment of the model. She conducted school-wide meetings where she presented staff with the underlying philosophy and main tenets of the TI model. She also facilitated visioning sessions in which stakeholder groups, including staff, students, parents, and central office administrators, went through the process of developing a school vision. She simultaneously worked with volunteers from the

staff to develop a leadership team to guide the initial implementation of TI. This team included the principal, parents, district administrators, and teachers. After the visioning activities were complete, Esther facilitated school-wide meetings where every staff member was introduced to a peer-led, team-based inquiry process for evaluating school practices and identifying issues at the school that needed improvement. She then guided the inquiry teams as they worked to develop action plans to address issues facing the school.

Esther's use of joint enterprise to introduce the reform was in synergy with the initial phase of implementation prescribed by TI. Data collected in the early stages of the implementation support this focus on process over the actual content of the reform model.

The coach's perspective

While Esther had a clear sense of what needed to be done at each school to facilitate implementation of TI, she also believed that the enterprise had to be done jointly. We saw this in the way she determined that teachers and the larger school community should play a role in directing her work, specifically about what needed to be addressed when. Early on, much of Esther's time in her assigned schools was spent meeting with TI stakeholders and building positive working relationships with them. She described using a strategy of taking a negative poll during teacher work group meetings in which she checked whether stakeholders were buying into that stage of the work:

> I generally tend to have next steps in mind but, if I'm the only person that owns that, it's no good. *So my job is to constantly make sure that everybody else is saying, "Yes, this is where we want to head next.* And we think we're ready for this." (Esther interview, 2008, author emphasis)

Esther never moved forward until she directly heard from the school community that they were ready. Despite pressure from state policymakers and stakeholders concerning the implementation (and success) of the TI model and sticking to the outlined timeline, Esther felt it important to privilege the school community's needs and the process of joint work, which included small groups of inquiry teams to identify key challenges and the corresponding evidence-based practices for later addressing those challenges.

Stakeholders' perspectives

The TI reform model was centered around the idea that everyone's voice should be heard. This included the requirement that each school's stakeholders would vote and have at least a 90 % majority agree to start the TI reform process. Oak Street teachers said that while they struggled with the initial process, they also came to understand the need for engaging in the implementation of TI as a joint enterprise. One teacher explained:

You can't just put things through that you want to put through; you don't just jam stuff through and put stuff in place. It's getting the buy-in that takes time. *That's my understanding*. It's a total bottom-up approach. Esther told us, you [teachers] collect all the data, you look at it yourself, and you determine what areas need to be addressed, what are areas of priority, what can we do to make changes in those areas of need. (Oak Street teacher interview, 2009, author emphasis)

Esther also spent considerable time bringing Oak Street parents into work on the reform process. One parent related:

We [parents] realized that we needed to become more involved as a part of the school, not just the kind of subculture of it. I've been invited to participate in one of the inquiry teams that they have, and I show up at meetings. I'm a source of information, I can also ask, I can investigate, I can inquire. (Oak Street parent interview, 2010)

Esther ensured that teachers and parents were active, joint participants in the reform process. From their perspective, they were the main drivers of the work.

The principal at Oak Street felt that members of his staff were hesitant to engage in joint work with Esther at first, in part because he believed teachers were used to district administrators directing their work. But the principal realized that by the end of their second year of working with Esther, the teachers were feeling comfortable with the TI process:

The staff has embraced TI. I'm really looking forward to the cadre [inquiry team] presentations on Friday when we'll begin to see what their action plans are, and what the recommendations for next year's goals will be. I get the sense of people feeling good about the fact that they will have a say in the process and we'll have a say in directing instructional and operational strategies for next year and years to come. (Oak Street principal interview, 2010)

In summary, our data suggest that Esther understood that as an external coach and not a permanent member of the school, the schools' understanding and ownership of TI was essential for the successful engagement in the steps of the process and for on-going change. She used a variety of strategies, including school-wide meetings, inquiry teams, and one-on-one meetings with parents, school leaders, and teachers around the benchmarks of the TI model, specifically to engage educators in a process that mirrored what communities of practice refer to as joint enterprise. We found the TI model's benchmarks were complimentary to these processes.

Mutual engagement: Sustained work through collaboration

The process

In the communities of practice model, mutual engagement around a joint enterprise creates the opportunity for learning through social interaction. Research suggests

that this setting offers a unique opportunity for tacit knowledge to be communicated and understood by group members (Nonaka 1994). Esther used mutual engagement to sustain the implementation of the second phase of TI benchmarks in her schools.

During this phase of the reform, Esther devoted considerable attention to creating and sustaining productive collaborative relationships. We found genuine collaboration and trusting relationships were required for staff to commit to engaging in the work of implementing TI. More importantly, productive collaboration was also required to maintain the work of the inquiry teams and to take their work beyond simply surface-level changes in practice. To this end, we found that Esther worked with staff in school-wide meetings to teach them the process for building consensus in school-wide decisions. Esther also negotiated with principals and district administrators to create more opportunities during the school day for collaboration.

The coach's perspective

As part of her work with the school staff, Esther assessed the strength of the existing relationships among staff in the schools. She trusted the signals from those being coached, rather than relying on the pre-set process outlined by a model. Esther understood that teachers needed to understand how to collaborate before the team could actually do the work it was expected to do. If those relationships were strong, Esther took this as a sign that they were ready to do the work of gathering data in their collaborative inquiry teams. For example, she explained:

> When I worked with one team earlier on in the year, I said to them, "Okay, so do you think we need more community developing kinds of—developing in sense of community spirits here?" Or, "Are you guys feeling like the collaboration is good and everybody is on the same page and getting along?" And they said, "Yup, we're good. We have—our relationships are solid. We're ready to move on." So, cool, that's what we did. (Esther interview, 2009)

If the staff relationships were weak, Esther took time to teach individuals how to use collaborative protocols to facilitate collaboration. At Pine Ridge, which had experienced high teacher turnover and where administrator–teacher relationships were characterized by mistrust, Esther reported that when she tried to move from the buy-in stage to the inquiry process, the teachers themselves opted to keep developing their relationships so that they could better collaborate in their teams:

> When I suggested the staff move to the next step, they said, "Nope, we need to come back and do more team building kind of stuff, because we don't even talk to each other. We don't know each other. We really don't even like each other that much." And it's awfully hard to get people to collaborate on problem-solving about their practice when they don't have any relationships with each other. (Esther interview, 2009)

In sum, Esther built relationships and collected feedback from teams to ensure that the teachers' work in those teams around learning about their teaching practices would result in meaningful changes to their practice.

Stakeholders' perspectives

The assistant principal of Pine Ridge echoed Esther's sentiments about needing to develop stronger relationships across the school community before engaging in the substantive work of data driven inquiry:

> And actually, we felt that the school wasn't ready to move on in the process because there wasn't enough teaming going on. So we decided to—you know, let's pull everybody together and let's work on some team building, so people really feel like there's more community purpose and that togetherness because we're finding a lot of issues still going on. (Pine Ridge assistant principal interview, 2010)

This emphasis on team-building at Pine Ridge was very different from Oak Street, where the teachers felt that they had already been working as a team for years. At Pine Ridge, teachers and administrators struggled to create an environment where they trusted one another and recognized each other's expertise. In both settings, the schools eventually did create collaborative routines for discussing potential change practices. We also saw that this mutual engagement and development of trust in the school community allowed teachers to take risks and assume leadership positions. During our observations, both Esther and school leadership commented that the teachers who had volunteered to lead inquiry teams or different elements of the process were not necessarily the teachers they would have chosen, but that they were doing excellent jobs. So, once mutual engagement had been established, Esther took responsibility for moving the process forward and the teachers and larger school community began to become experts of the TI process.

Legitimate peripheral participation: Moving the center of expertise

The process

While Esther was initially responsible for leading both of her schools though their first inquiry processes, the final stage in TI implementation was for the coach to turn over responsibility for facilitating the improvement process to the school's stakeholders (Allen 2008). During this phase, the school staff had to take risks and develop their own expertise related to the reform process, while the coach played a supportive role. Esther's strategy was to become less directive in her work with teachers and the restructured governance teams and to serve only as a person who encouraged their ideas. Again we saw congruence between the strategy Esther used and the TI model.

Esther related that early in the process she continually needed to reassure teachers and the school community that their voices should and would be heard, and that if they assumed leadership roles in their schools, the community and the educational experiences of their students would improve. While Esther's expertise was an essential component of the initial stage of implementing the TI reform model, our data reveal that she was eventually able to help individual teachers

recognize and share their own expertise in their school communities in order to become active facilitators of the change process.

In the second year of implementation, there was evidence of teachers moving from the periphery to the center. For example, Esther largely stopped facilitating school-wide meetings and engaged in a meritocratic process where teachers self-selected to facilitate smaller inquiry teams. These smaller inquiry teams allowed opportunities for teachers to share their knowledge and expertise with one another, and Esther expected that teachers in inquiry teams, as well as principals, would move their agenda forward in between her visits. During one of these inquiry team meetings, when Esther was not present, we observed teachers and community members brainstorming ways to carry out an element of their action plan through the inquiry process:

> The Family and Community inquiry team is discussing school uniforms. They want to make sure that parents help maintain school policies on uniforms. One group of teachers is exploring disciplinary actions for uniform violations; another, incentives for parents to maintain the policy; and a third, on how to establish better communication with parents about these policies. I end up sitting with the teachers discussing possible action plans for communication. They decide to test out the efficacy of sending home a pamphlet that includes information about uniforms, attendance and homework. The teachers decide to create a pamphlet that is in several languages [Spanish; Bosnian; Swahili] because so many of the parents are not first-language English speakers. (Fieldnote, January 29, 2010)

The idea for the pamphlet was tested out in several classes and resulted in fewer violations and school absences. Teachers also received feedback from parents that they liked the multilingual pamphlet. This particular plan became a school-wide policy as the reform process went forward (Oak Street school-wide action plan 2010). The example demonstrates how TI members, who were peripheral initially, were able to gradually come to rely on each other as experts in the reform process. Esther noted that by the end of the 5-year process, as members of the school communities became confident in their ability to carry out the reform model on their own, the role of school-level actors evolved into process monitor and evaluator.

The coach's perspective

Esther set high expectations for her schools to become self-sufficient so that teachers, rather than outside professional development providers, would become the experts who taught and supported each other. She said that a big part of her job was to be their cheerleader and to encourage them to take on these new professional responsibilities. Esther acknowledged, however, that it was not easy for teachers in her schools to see themselves as legitimate experts. She attributed much of their unwillingness to take on new roles to a culture of fear she saw in schools that had been labeled as failing. According to Esther, teachers were fearful of putting their own ideas into action because of the scripted curriculum the district used and

because of concerns that diverting from that curriculum would cause children's test scores to drop:

> I think, really, people just need constantly to be given permission to try new stuff. Because what we've done in our country with No Child Left Behind is we've beaten teachers up to the point where they're afraid to do anything other than follow the prescription….And that's a huge part of what I spend time dealing with, is encouraging them and [convincing] them that it is, indeed, safe for them to try something new. (Esther interview, 2010)

Despite some of these challenges, Esther was able to guide both schools through inquiry projects in which they developed school-wide plans to address some of their self-identified school priorities and challenges.

Stakeholders' perspectives

Teachers' comments echoed what Esther described facing when she first told them that they would have to take the lead in the process. One teacher described her peers' response to Esther as pure frustration and fear of the unknown:

> In the beginning, everybody was kind of frustrated and didn't know…I mean, these people are used to being told what to do. And so by giving them the option of developing a plan on their own, you know, they were kind of overwhelmed with the idea. Some were saying, "Okay. This is what we want to do. And now, *you* do it for us." And Esther was trying to explain that there is no list. You have to come up with the ideas and how you want to do it and I will help you. (Pine Ridge teacher interview, 2011)

There was also ample evidence from stakeholders to suggest that Esther was indeed working towards the goal of empowering the staff to take on the improvement work on their own. The following testament is from one of the cooperating principals:

> Esther is phenomenal.…She really has been fostering our own sense of ownership. Everyday we are taking more of the responsibility and she's there to guide us, but it's really more of a supportive role than it is a directional role. (Oak Street principal interview, 2011)

Teachers also talked about how they had not typically met across grade levels or disciplinary teams because of a history of working in silos. With Esther's help, however, they created new ways of working together so that they began to take on new roles and uncover strengths in one other that had previously been obscured:

> And what I saw beginning was the shaping of a coalition of teachers who'd been fractured and separated by grade-level teams or cliques. But we've formed into a different arrangement as she was empowering us. We were being empowered to communicate across grade levels. We are able to contribute strengths that had been hidden in roles that we played. (Pine Ridge teacher interview, 2011)

Another teacher told us that, with Esther's encouragement and her leadership in their inquiry team work, more of her peers had begun to participate in the school improvement process. This teacher said that more teachers were participating than in the past because they felt greater confidence in their own ability to help direct the improvement process through their inquiry team work:

> She points us in the right direction. I think that—the empowerment here by building capacity has really worked. People are coming forward. It has become a school of people who are all feeling good about who they are and what they're doing, and want to move forward, and realize that everybody has an opportunity to do something that they feel really comfortable with. (Oak Street teacher interview, 2010)

In this manner, the coach legitimated teachers' participation in the TI reform activities and the development of their identities as experts in the reform model. These data highlight that Esther was successful in implementing some of the main tenets of the TI model and that teacher empowerment was possible and necessary for the reform process to move forward.

Conclusion and implications

The TI reform model is a fruitful case for studying coaches in an intermediary organization. The results from this study demonstrate how an external coach introduced and promoted various elements of a reform model, and lenses from the communities of practice framework reveal the dynamic work of coaching in two urban schools. Specifically, by studying how staff engaged in specific tasks, including negotiating elements of the work and drawing on teachers' expertise to address that work, we gain new understandings of how coaches can collaborate with teachers and administrators in reform work. While the coach may have initially been positioned as the leader of the reform, the teachers ultimately took the lead in each school context. And Esther's most important role in initiating reform was to help the staff come to understand that they were capable of developing and instituting new practices that could improve their schools.

Our findings show how concepts from communities of practice can help us understand coaching processes in the context of school change. Coaches working with school communities to implement comprehensive school reform can leverage change via their outsider–insider position, suggesting that joint work can be both intra- and inter-organizational. In addition, this study extends our understanding of intermediary agencies by analyzing the dynamics of reform in an organic model (Purkey and Smith 1985). Honig and Ikemoto (2008) and Datnow (2006) revealed how adaptive assistance relationships emerge in intermediary agencies with prescriptive reform models. However, the comprehensive reform model described here is bottom-up, adaptive in nature, and privileges school communities as experts over external agencies. Thus, TI supported the coach's efforts to work collaboratively with teachers, administrators, and other members of the school community. Our findings further suggest that when a coach from an intermediary organization

provides adaptive assistance for an extended period of time, teachers can and will take responsibility for authentic organizational change.

Our findings on coaches' work have important implications for policy. Despite the promise of local autonomy, federal, state, and district policies still present roadblocks to coaching. Policymakers and administrators should consider the quantity of reforms and initiatives that schools are encountering. Schools need to be granted the time to conduct their reform work and alter their practices in order to bring about sustainable change. The current findings also reinforce the absolute necessity of including teachers and principals at each stage of reform implementation. CSR is not a model that can be purchased and placed into schools. School reform is a process of learning and change that is done by teachers and principals who are willing to work together over multiple years.

Many intermediary organizations rely on coaches to teach teachers about reform models and to motivate changes in practice that may span content areas, and yet research on coaching has largely neglected this area and instead has been limited to examinations of the roles and responsibilities of content coaches (Matsumura et al. 2010). By studying the activities of reform coaches, we can uncover critical steps in implementation. Furthermore, this line of research will draw attention to the relationships between coaches, school-level actors, and change. Additional studies should also be conducted utilizing the communities of practice lens to analyze coaching in different types of CSR models. This inquiry would advance our understanding of the relationship between coaching and the implementation of school improvement systems.

Our study does reveal some limitations to the communities of practice framework. The framework pays less attention to principals' competencies, including their knowledge of a reform effort and school improvement. Thus, it is challenging to consider how a coach's knowledge and beliefs impact collaborative work practices. This framework also downplays issues of power and politics. For instance, how do power differences between teachers and coaches affect teacher engagement? Nevertheless, the framework enabled us to highlight important implications for practice. First, trusting, productive relationships among stakeholders are necessary to carry out the reform process, and where these relationships are weaker, the process may proceed more haltingly. In addition, professional development related to reform models needs to recognize and reinforce teachers as educational experts. When teachers are active participants in the reform process, they are able to bring to bear skills and expertise in a manner that externally-prescribed reform models often ignore (Honig and Rainey 2012). Finally, coaches should have opportunities for professional learning around how to collaborate with and motivate stakeholders, in addition to the specific mandates of the reform model that they are charged with enacting.

This case study of coaching has implications for future research on implementation. Researchers should use the communities of practice framework to surface the collaborative activities that unfold during implementation between administrators, intermediary actors, and teachers. This research would deepen our understanding of the relationship between system and non-system actors (Coburn 2005) and could explain patterns of implementation. As this study and other research on CSR models

has shown (Honig and Ikemoto 2008; Park and Datnow 2008), reforms are more successful when they are based on adaptive–assistance relationships. Yet there still needs to be better alignment with federal, state, and district initiatives if the voices of the school community are going to count in the school reform process.

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