Changing School Culture: Using Documentation to Support Collaborative Inquiry

This article considers how documentation as a professional development tool acts as a change agent for teachers and how collective engagement in the documentation process mediates the inherent tensions of working and learning in a group. Three groups of educators, at three distinct schools, used Reggio Emilia-inspired documentation as the mediating activity through which to construct collective discourse, enhance professional development, and grow collaborative inquiry. Changes in culture and practices at each site are framed through the tensions and subsequent group shifts these educators experienced as they structured their collaborative practices, developed intentional experiences, and cultivated collective ownership of the process. Managing the challenges that emerged both strengthened the community of learners and enhanced teachers' abilities to observe, record, analyze, represent, and respond to the teaching and learning that occurred in their classrooms, ultimately changing the culture of their learning communities.
Documentation is a way of acknowledging our own experience and expertise. Working in this way is challenging because it is hard. I feel it is empowering for teachers.

—Kindergarten teacher, Eliot Pearson Children’s School

Teachers who engage in collaborative inquiry often struggle with questions about how to define their work, share power, and validate their process. For groups that use documentation as a guiding tool, discerning how and where to focus energy in creating and analyzing documentation adds further complexity to their work (Cadwell, 1997). Inherent tensions exist about whom the documentation is for, why teachers are engaging in this process, and how such a process may be relevant to both teacher and student learning.

This article examines how teachers and staff in three distinct educational settings—a community childcare center, a public elementary school, and a university lab school—developed democratic cultures of learning and risk taking. The educators adopted documentation as a tool to support professional development, evolve their local knowledge, and grow their cultural identities as learning communities. Each school experienced shifts in how teachers worked as a group, perceived their own teaching and learning, and thought about their roles as professionals. Through examining these schools’ stories, this article seeks to address the following questions: (a) How does documentation as a professional development tool, act as a change agent for teachers? and (b) To what extent does collective engagement in the documentation process mediate the inherent tensions of working and learning in a group?

Literature Base and Theoretical Foundations

Cultivating Collaborative Teacher Inquiry

Improving teacher practice via collaboration is a recurrent theme in conversations about school reform (Carnegie Forum, 1986; Goodlad, 1994; Holmes Group, 1986; National Commission of Teaching and America’s Future, 1996). Little (1999) found that collaborative tolerance and parity among teachers working in groups provokes changes in teacher practice. Feiman-Nemser (2001) concluded that if schools are to produce more powerful learning for students, teachers must be afforded enhanced learning opportunities that go beyond episodic, surface level experiences.

Collaborative professional development has been theoretically framed in the literature on communities of practice (Wenger, 1998), professional learning communities (DuFour & Eaker, 1998, 2002; Grossman, Wineburg, & Woolworth, 2001; McLaughlin & Talbert, 2001), teacher learning communities (Horn, 2005), and teacher inquiry (Cochran-Smith & Lytle, 1999). Cochran-Smith and Lytle (1999) see such communities as places that “support teachers as they generate local knowledge, envision and theorize their practice, and interpret and interrogate the theory and research of others” (p. 289).

However, researchers have also asserted that schools have few well-defined structures for fostering collaboration and shared norms. School personnel need to organize in ways that promote interactive learning among teachers (Elmore, 2002; Feiman-Nemser, 2001; Lortie, 1975; Osterman, 1990; Tyack & Cuban 1995). The tools used to make teaching and learning visible to colleagues are also vital to the instructional change process. Cobb, McClain, de Silva Lamberg, and Dean (2003) noted that knowledge about tools and artifacts, such as those used in the documentation of student work, is underdeveloped in the research on professional development yet is an important aspect of successful communities of practice.

Tensions in Collaborative Activity

Claiming that communities of practice are a crucial locus of learning does not make the process of developing such communities simple. The act of meeting as a team can bring the appearance of collaboration to the workplace, reinforcing
counter-productive patterns that hinder the development of substantive teacher communities (Grossman et al., 2001; Hargreaves & Dawe, 1990; Horn, 2005; Little, 1999; Wenger, 1998). Indeed, working collaboratively is inherently replete with tensions that often arise from the expectation to satisfy the sometimes conflicting needs of the group as a whole and its individual members (Achinstein, 2002; Hackman, 2002; Smith & Berg, 1987; Wilson, Burnham, & Clark, 2008). How a staff manages the inherent tensions, develops trust, and negotiates power relationships is part of the ongoing experience of the group.

The Role of Documentation

This article describes three different sites that were engaged in documentation processes influenced by Reggio Emilia philosophy, Critical Friends Groups, and Harvard Project Zero’s Making Learning Visible project (Blythe, Allen, & Barbara, 1999; Cadwell, 1997; Making Learning Visible, 2008). The Reggio Emilia schools inspired each site to look more closely and collectively at children’s work. The Critical Friends approach provided more structured and intentional facilitation of group meetings. The Harvard Project Zero model provided a working definition of documentation as the practice of observing, recording, interpreting, and sharing, through a variety of media, the processes and products of teaching and learning in order to deepen learning. Through regular examination of photographs, videos, and related artifacts, teachers pose questions, receive feedback, and generate new ideas about their work with children. Documentation means more than a collection of teacher- or student-produced artifacts; it includes the conversations and reflections such artifacts evoke. This work involves a continuing dialogue with children and colleagues where teachers provoke intellectual growth of children via activities, and offer the documentation of these provocations back to teachers and children (Blythe et al, 1999; Edwards, 1998). “Over time, group learning can lead to the creation of collective knowledge and a community culture in which the goal is to create public understanding of ideas and phenomena” (Harvard Project Zero, 2003, p. 12).

The careful examination of student work and teaching practices as influenced by the aforementioned philosophies opened the door for teachers to take risks and ultimately improve their practices. Each site sought not to exactly replicate a particular system, but rather to adopt an inquiry stance with various paths to success. This article is an opportunity to understand the inner workings of communities of practice engaged in documentation and examines the tensions and shifts teachers experience in collaborative work. In the sections that follow, we present the stories of three sites, highlighting key contextual features related to school change and the implementation of documentation.

Three Settings, Three Stories

Infant Toddler Center

The Infant Toddler Children’s Center is a nonprofit community early care and education program, serving infants through school-age children in a suburban community. Over the years, teachers developed curriculum based on informal observations of children’s play, choice of materials, and expressed interests. They also had a strong belief in the importance of honoring individual differences and comfort with following the children’s lead in creating innovative activities. As this small grassroots program grew to 10 classrooms, the staff and parent board attempted to more formally clarify and characterize the program’s educational philosophy and mission. They realized that their approach was most closely aligned with emergent curriculum, the project approach, and the philosophy of the Reggio Emilia schools.

Inspired by the power of documentation that they had seen on a visit to Reggio Emilia schools, a need to gain clarity about the school’s philosophy, and a desire to answer parent questions about when the learning part of the program took place, administrators encouraged teachers to document what was happening in the classrooms.
With administrative guidance, teachers exhibited observations and stories of children’s activities in the halls so that families could see some of the richness going on in classrooms. However, doubts and tensions surfaced. Teachers, although committed to a play-based, responsive curriculum, were sometimes confused by questions from parents about what children were learning and why they were not seeing more direct instruction of letters and numbers. Publicly displaying documentation of the program’s philosophy challenged the staff to think more deeply about classroom practices.

**Greenvale Public School**

The Greenvale Elementary School is a public school located in a rural community that is home to a large university and other colleges. The Greenvale inquiry group included five self-selected teachers working at the first, third, and fifth grade levels and one teacher of English Language Learners (ELLs), as well as a volunteer facilitator from a local university. This group engaged in a 16-month exploration of documentation as a tool for understanding and developing effective differentiated instructional practices for ELL students, as well as in language arts and social studies. During their first year, the teachers and college-based facilitator explored the use of Differentiated Instruction (Bender, 2000) with their rapidly changing student population.

The facilitator entered the group prepared to develop a collaborative inquiry community. With her leadership, the teachers functioned primarily as a reflective study group. Although the facilitator planned and led meetings, she hoped to eventually create structures through which teachers could take ownership of their inquiry. Teachers took turns presenting student work, assignments, and strategies such as graphic organizers that students use in their writing, looking for patterns and new ways of thinking about teaching.

A natural tension emerged. Although the teacher participants were invested in learning and reflecting on the content of Differentiated Instruction, the facilitator was invested in the process of developing a sustainable community of learners. Issues regarding the roles of participants, ownership of knowledge, and acknowledgement of conflicting agendas became both challenges and vehicles for the growth of the group. During the second year of meeting together, the teachers received a grant that held them accountable for a final product—a documentation gallery walk (a museum education-inspired process of exhibiting and commenting on a display) and a staff-development workshop on the Differentiated Instruction process for colleagues at their school. This set the stage for utilizing documentation as a tool for understanding children’s learning, reflecting upon adult learning with colleagues, and shifting the norms and mechanisms of the groups’ dynamics and intention.

**Eliot-Pearson Children’s School**

The Eliot-Pearson Children’s School is a laboratory school situated in the Department of Child Development at Tufts University. The school serves a diverse population of children ages 2.9–8 years. It is a site for teacher training, observation, and research, with a staff consisting of head teachers, graduate student teaching assistants, and student interns. As an inclusion model, the school works closely with several districts to serve many students with special needs.

Part of the school’s mission is to generate new knowledge about teaching and learning while creating a community of learners, for both children and adults. During the past 5 years, the school developed a school wide inquiry (SWI) process to support its mission while enhancing professional development. A part-time research coordinator position was created to facilitate the SWI in partnership with the Director. Each classroom team collected, reflected on, and analyzed artwork, photos, dialogue, and video of children, often bringing documentation back to the children, asking them to think about their learning. At monthly staff meetings, teaching teams shared documentation with one another and solicited feedback using specified protocols (see Appendix A). The cycle of documentation culminated with a final exhibition of Zoom pan-
els (boards designed to illustrate the teaching and learning that had occurred throughout the SWI process) that were displayed for teachers, parents, and university colleagues to reflect upon (Mardell et al., 2009). Teachers became invested in and frustrated with the collaborative process, realizing that moving forward necessitated finding more time to work together and redefining the purpose of the SWI process. They grappled with their roles as teachers, mentors, and researchers, and struggled with the tension of integrating documentation into the daily work of teaching.

The Act of Going Public: Documentation as a Transformation Tool

Implementing the documentation process shifted the nature and dynamics of each inquiry group. Meeting regularly to consider children’s work and its implications for classroom practice was a fundamental step in forming communities of learners and reflecting upon teacher practice. However, each site experienced its most powerful shift when it decided to share documentation and collective learning in public arenas. This act of going public, via displays of children’s work and teacher reflections for colleagues and parents, catalyzed each group to work through the challenges and tensions exposed by this process.

Infant Toddler Children’s Center

In a series of staff meetings, teachers used agreed-upon criteria to give each other feedback on their bulletin boards. As the appearance and content of the bulletin boards improved, parents took note and commented. The displays sparked dialogue among teams, across classrooms, and with parents. The staff began to ask themselves more questions about this work. Were these displays just for parents? One teacher noted:

> Having to create a display together helped us all to talk about the reasons we arrange the environment the way we do and what is behind our choice of materials. As we worked together, we had an excellent discussion among our classroom team members.

Such conversations were not always tension-free. The pressure to create a public display sometimes caused frustration. As one teacher commented, “Design by committee is not always the best way, especially the visual part. However, as a team we learn a lot about each other.” Providing a focus for the display, such as a question about how children learn, along with some suggestions for how to organize content, helped make the process less stressful.

The use of specific tools to guide collaborative work played an important role in the shift in culture at the center. One teacher developed a form that all classrooms adopted during weekly team meetings to guide the process of sharing observations, interpreting the data, and adjusting practice. As one teacher remarked, “Working together in this way gives everyone a voice. I feel that we all own the room.” Specific tools also created a shift in the weekly lead teacher meetings, which previously were venues for complaints and mini presentations by a teacher or administrator. The group adapted a Critical Friends Protocol (see Appendix B) in an attempt to work more collaboratively (Blythe et al., 1999). Each lead teacher presented a dilemma or idea, prepared questions for the group ahead of time, and then spent most of the meeting listening. This method created a power shift in the group and transformations in the professional culture. One teacher commented:

> Interpreting documentation has given us a common focus. When we are working on something together, the energy that is developed from that is always impressive. Something that I think can stimulate a thought in someone else—what others say or see—can trigger new ideas in me.

The collaborative interpretation of documentation became a model for active listening and more effective, inclusive problem solving in the organization as a whole.
Greenvale Public School

The gallery walk and workshop required by the inquiry group’s research grant pushed teachers to take ownership of the documentation, although it also brought out tensions in the collaborative process. Teachers began to meet without the facilitator as new understandings of their own knowledge and process created a dramatic shift. One teacher shared:

At first we were focused on what our kids were learning when we differentiated instruction. Now, we realize that this process of inquiry (and documentation) is important to our own learning as teachers. We get a lot from the collaboration ... the give and take during our meetings.

Over time, all members took turns presenting documentation such as student writing samples, images of students working, or student reflection sheets and assessments, and eventually developed protocols to look at this documentation more intentionally (see Appendix C).

Through simultaneously creating documentation of the inquiry group process, the facilitator reevaluated her assumptions about the nature of democratic group structures. She adopted an identity as a peer-learner and as the group dynamics became more egalitarian, teachers developed a deeper understanding of documentation practices. As she shared her own documentation of the group’s ideas, attitudes, and process, a parallel process emerged. The facilitator used her own documentation of the teacher meetings, presenting dialogue and observations of teachers, to analyze the evolving democratic processes of the inquiry group, while teachers used documentation of their students’ work to analyze the effectiveness of Differentiated Instruction in their classrooms. Repeated presentations of student work and collegial feedback clarified not only what students appeared to know and understand, but also teachers’ developing knowledge about supporting the construction of student understanding.

The gallery walk workshop for teacher colleagues also served as a catalyst for shared leadership and in-depth learning. During the preparations, the facilitator noted:

It feels as though (teachers) have taken over the workshop. They are meeting at school to create their panels for the gallery walk and they have stopped asking me “what I want.” I think they are asking each other, instead. I still schedule the meetings and I’ve presented my panel about the inquiry process.... The teachers are in the lead now ... in charge of their documentation.

Teachers began to trust the process of interpreting, analyzing, and drawing from pieces of student work both to validate and direct their pedagogical decisions in the classroom, and to further develop collaborative inquiry as a continuing professional development endeavor.

Eliot-Pearson Children’s School

Over time, the SWI process began to change teachers’ perceptions of themselves and their perceptions of the power dynamics within the institution. The SWI shifted from being driven by the research coordinator to being driven by the teachers and the documentation (as occurred at Acton and Greenvale). Initially, teachers were provided with information about documentation and encouraged to mess about, taking risks and sharing discoveries through conversations and the creation of both raw and finished documentation. One teacher described participation in this process as having direct relevance to his teaching:

I leave meetings feeling like I am going to try something different. It has influenced and affected the whole community in terms of giving critique and feedback. Things have changed around here. Both kids and adults give feedback and ideas. It affects my teaching because I am part of a larger group entity, more connected. Things aren’t so top-down.

This climate gave teachers the freedom to experiment with new ways of interacting with children, contributing to the view that teachers
are researchers who use their classrooms as laboratories to discover new ways of teaching and learning.

Eventually, teachers asked for and created additional structure and guidance. Teachers wanted to steer the process, support each other, and be guided by the expertise of outside consultants. This shift toward a balance of power moved the teachers from seeing themselves as reflective consumers of theory and research to active and equal participants who generate theory and research that can inform their practice.

Due to the school’s position within a university setting, this shift magnified a common tension in teacher research (Given, Kuh, & LeeKeenan, 2009). The teachers’ collaborative inquiry stance left them positioned between the worlds of classroom practice and traditional research agendas. This tension became a provocation for teachers to go deeper in their thinking about teacher inquiry. The director tried to build new connections between the school and the Child Development Department. She reflected:

When I first came here, few teachers did presentations or were interested in writing. I think within our own community, within the department … we have tried to build bridges, really meaningful, reciprocal partnerships.… I have pushed a lot, but it has to come from the teachers, driven by our group.

The teachers welcomed this connection but were wary of boxing themselves into a traditional research paradigm. It remained important to use documentation of student activity from a Reggio Emilia perspective to explore their practice and inquiry. Teachers wanted to retain the freedom to discuss topics that emerged from their classrooms, without what they perceived as the constraint of a traditional research agenda to prove or disprove a particular hypothesis. Teachers and administrators noted that “before, we were a reflective community, but not at the level that we are at now.” The work teachers did together informed not only what they did with children, but also how they did it.

**Tensions, Shifts, and Tips**

Research on communities of practice and professional learning communities typically highlights elements of teacher collaboration that can lead to successful learning experiences for teachers (Cibulka & Nakayama, 2000; DuFour & Eaker, 1998; Hord, 1997; Little, Gerhard, Curry, & Kafka, 2003; McLaughlin & Talbert, 2001). Such elements include: scheduling collaborative meeting time and space; focusing on student work and artifacts; using tools and protocols to structure group conversation; deepening conversation through skilled facilitation; and generating explicit purposes and products of collaborative activity. Although advocacy for these key elements is common throughout educational discourse, specifics of how to implement these elements are less common.

Despite following the customary roadmap for successful collaborative experiences, tensions at all three sites complicated the process, requiring deliberate negotiation of leadership roles, the content and focus of what was to be documented, and structures and protocols used during meetings. Table 1 illustrates the tensions that emerged and the shifts that occurred and continue to move collaborative work forward. Building capacity for this work with teachers who had different backgrounds and distinct professional development needs created both challenges and rich opportunities. As participants developed strategies to manage the emerging challenges, the tensions within each group did not resolve but rather evolved. Solutions were proposed and tested, and groups responded constructively, provoking new levels of knowing and doing along with new challenges and opportunities.

As illustrated in Table 1, the combination of specific structures or protocols to guide conversation, the delineation of the intention behind the inquiry, and the cultivation of collective ownership provide the specific guidance teacher inquiry groups may need in order to be successful despite inevitable tensions that arise during collaborative work. At each site, effective facilitation and scaffolding of collaborative experiences was pivotal and was supported through various means. Doc-
Table 1
Creating a Culture of Learning: Making a Shift

<table>
<thead>
<tr>
<th>Common Experiences</th>
<th>Common Problems Arising from Tensions</th>
<th>Shifts in Practice: Suggestions for Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structuring</td>
<td>Investment in process creates need for more meeting time, which may conflict with school norms and tight schedules.</td>
<td>More predetermined and focused meeting times.</td>
</tr>
<tr>
<td>collaborative</td>
<td>Collaborative work generates need for new mechanisms for communicating and working together.</td>
<td>Protocols, planning guides, and feedback forms align group process with group intention.</td>
</tr>
<tr>
<td>practices</td>
<td></td>
<td>Develop products to make work visible to others in and outside of the school.</td>
</tr>
<tr>
<td>Developing</td>
<td>Experimentation with documentation leads to overwhelming amounts of data.</td>
<td>Less is more: seek more intention in the work.</td>
</tr>
<tr>
<td>intentional</td>
<td>Uncertainty emerges about purpose, audience, and use of documentation.</td>
<td>Adopt guidelines to structure documentation process.</td>
</tr>
<tr>
<td>experiences</td>
<td>Confusion grows about teachers’ new role—part practitioner, part theoretician/researcher.</td>
<td>Propose a shared focus or question to center the work.</td>
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<td></td>
<td>Need for guidance and facilitation differs for different groups.</td>
<td>Make work public: feedback creates new understandings and shared responsibility.</td>
</tr>
<tr>
<td>Cultivating</td>
<td>Balance is needed between sharing power and maintaining flow and facilitation.</td>
<td>Teachers share facilitation duties with group leaders.</td>
</tr>
<tr>
<td>collective</td>
<td>Opportunities are needed for all voices to be heard.</td>
<td>Sharing student work builds capacity among group members.</td>
</tr>
<tr>
<td>ownership</td>
<td>Various levels of experience and expertise are hard to integrate.</td>
<td>Professional development shifts from an external entity to an internal, evolving experience.</td>
</tr>
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</table>

Documenting, reflecting upon, and sharing practice with colleagues empowered teachers to identify themselves as experts in both their classrooms and within their communities of practice. As teachers moved toward a stance as inquirers, their perceptions of themselves shifted, and parallels between adults’ and children’s learning were illuminated.

As occurs within classroom communities, the groups at these three sites discovered the developmental aspects of building new knowledge and strengthening communities of practice. Each step forward brought new challenges, insights, and learning possibilities. Embracing each tension as an essential catalyst for growth strengthened and solidified both the collective process and individual learning. By documenting both child and adult processes, teachers focused on specific aspects of learning and practice, shifting the challenges of group participation towards the development of shared local knowledge. Taking the next step of sharing the groups’ new knowledge with families, colleagues, and other community members not only documented the professional growth of participants, but cultivated new culture identities as learners, exhibitors, and experts.

**References**


### Appendix A:

**Collaborative Assessment Conference**

*(Developed by Steve Seidel or Harvard Project Zero)*

#### I. Getting Started

The presenting teacher puts the selected work in a place where everyone can see it or provides copies for the other participants. She says nothing about the work, the context in which it was created, or the student until Step V. The participants observe or read the work in silence.

#### II. Describing the Work

The facilitator asks the group, “What do you see?” Group members respond without making interpretations, evaluations about the quality of the work, or statements of personal preference. If evaluations or interpretations emerge, the facilitator asks the person to describe the evidence on which those comments are based.

#### III. Asking Questions About the Work

The facilitator asks the group, “What questions does this work raise for you?” Group members state any question they have about the work, the child, the assignment, the circumstances under which the work was carried out, and so on. The presenting teacher makes notes about these questions (but does not answer them yet).

#### IV. Speculating About What the Student Is Working On

The facilitator asks the group, “What do you think the child is working on?” Participants, drawing on their observation of the work, make suggestions about the problems or issues that the student focused on in carrying out the assignment.

#### V. Hearing From the Presenting Teacher

The facilitator invites the participating teacher to speak. The presenting teacher provides her perspective on the student’s work, describing what she sees in it, responding to questions raised, and adding any other information that she feels is important to share with the group. The presenting teacher also comments on anything surprising or unexpected that she heard during the describing, questioning, and speculating phases.

#### VI. Implications for Teaching and Learning

The discussion opens up to a more general conversation about teaching and learning, perhaps with a guiding question.

#### VII. Reflecting on the CAC and Thanking the Presenting Teacher

The group reflects together on their experiences of or reactions to the conference as a whole or to particular parts of it. The session concludes with acknowledgment of and thanks to the presenting teacher.
Appendix B
(Protocol for Infant Toddler Center Lead Teacher meetings adapted from the Critical Friends Protocol first developed at the Annenberg Institute for School Reform at Brown University)

If you are the leader of the group:

1. Decide on what you want to bring to the group—could be an issue, a question you have, some observations you have made, something you are in the midst of working on, a new idea you have learned about and want to figure out how it applies to ITC—anything you want feedback and ideas from the group on.

2. Let the group know briefly in writing what the general topic is before the meeting. Keep a copy of this write-up for the lead teacher meeting notebook.

3. At the meeting, appoint a timekeeper/facilitator who will let us know when to stop the business part and when to begin wrapping up the discussion. This person will write up a brief summary of what we concluded to put in the lead teacher meeting notebook.

4. You will begin the meeting by describing your topic and asking a question for feedback and discussion. Hopefully, you will then mostly listen to what people have to say, clarifying what you mean and asking additional questions if necessary.

5. During the last 15 min, we will try and summarize what was said and define any next steps if appropriate. Depending on the topic, you might ask each person to briefly write or say something that they are taking away from the discussion.

Appendix C
(Greenvale Protocol developed by group members and facilitator)

1. Group members viewed copies of one member’s documentation for about 10–15 min and sometimes were given a focus or question by the presenter.

   (Example: What are this student’s strengths? In this lesson I wanted to focus on organizing information. How do you think this student organized themselves in this work?)

2. Group members commented on what they noticed about the documentation.

3. The presenter described their purpose for the work/strategy/documentation and asked questions of the other group members.

4. The group had a general discussion, raising questions and/or advising each other and the presenter.

46