Supported Collaborative Inquiry & Teacher Learning

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Introduction
* It’s given us a vehicle for being professional and collaborative. Acting as colleagues in a professional manner and not just a bunch of teachers talking about affecting my classroom (Carrame, 5th grade science teacher, April, 2006).

The purpose of this research is to understand the dynamics of teachers’ growth and change as they participate in supported collaborative inquiry in a professional learning community (PLC). There is an “optimistic premise” among teachers’ participation in PLCs; however, what teachers do during and as a result their participation is said to be “hidden inside a black box” (Littell, 2002).

Supported teacher collaborative inquiry draws upon the work of Darling-Hammond & McLaughlin, 1995; DuFour, Eaker, & DuFour, 2005; McLaughlin & Talbert, 2005, and has the following specific criteria (Nelson & Slavit, in press):
1. Teachers actively seek a shared vision of high quality teaching and learning.
2. Teachers actively strive to emerge as an interdependent group associated with their colleagues’ needs, norms, and goals.
3. Teachers work with teachers in the design of an inquiry focus.
4. Teachers are supported in the design and implementation of the inquiry by a facilitator with content and facilitation expertise.
5. The inquiry includes an action-oriented phase grounded in the work of teachers. 
6. Teachers are actively supported in obtaining intellectual and material resource support of building administrators, and fitting the inquiry within the context of the larger district, state, and national goals.

Figure 1: The Inquiry Cycle

Theoretical Framework
- Powerful PD disrupts the isolation of teaching and is:
- situated in teachers’ work (especially with respect to the discipline and the students);
- promotes critical, dialogic inquiry and reflection with colleagues;
- meaningfully connected to other school and district initiatives (Gamaran et al., 2003; Little et al., 2003, Pulham & Bolko, 2005);
- Critical and reflective collaboration requires an Inquiry stance (Sinirlik, 1998) involving knowledge negotiation (Nelson, 2005)
- An inquiry stance involves teaching as practice, teacher’s generation of knowledge of teaching (Cochran-Smith & Lytle, 1999)
- Dialogic interactions show “a willingness to wonder, to ask questions, and to seek to understand by collaborating with others in the attempt to make answers to them” (Wells, 1999, p. 121).

Findings

Developing an Inquiry Stance: Two Examples
PLCs did not automatically assume a collective stance toward dialogic inquiry. By the end of the school year many PLCs could demonstrate a shared inquiry stance, while many functioned as a more traditional community—sharing information, more focused on the collection and engagement in common patterns of “teacher talk” focused on curricular, administrative, and student-related issues; relationships between a principal and lead teacher in their collaborative activity were evident across PLCs. Also evident in PLC conversation was the influence of external factors, especially, state standards and testing, the nature of the discipline (science, mathematics), and the culture of the teacher community within the school.

Silver Valley: Eight science and mathematics teachers, from the (only) middle and high schools. Five of these teachers had been in a PLC the previous year.

Inquiry Question: How can we help our students improve their scientific and mathematical communication skills?

Collaborative Activities Undertaken by Teachers: Dialogue Constrained by Traditional Community:
- Inquiry focus emerged from research they read together in the first year and carried over into the second year; teachers value their time together
- In this year in particular there was a large focus on the primary school... we’re finding that now we put our heads together, it comes out pretty good most of the time.

- Teachers share stories of classroom practices; they do not implement a common teaching activity to collectively study
- Teacher educators told us that the greatest change they observed was students being asked to explain their thinking, and that it was the teachers who were most receptive.
- Teachers give a survey to all district teachers to find out how other teachers value: they give a pre- and post-assessment to students but do not analyze the results collectively. They look at student work together, and many use quiz and test scores to indicate students’ understanding
- “The major hold-up of inquiry is that we all think it’s a good idea but I’m just not sure I know how to do it. I probably I don’t think just using it...”
- Teachers discuss ideas about high quality learning & teaching, occasionally they do not pursue meaning related to their inquiry focus.
- Teachers hold collaborative meetings where they compare students’ work; they give a pre- and post-assessment to students but do not use them to help improve or change their teaching.
- Teachers use student data to focus attention on links/gaps between teaching and learning
- Critical other people, especially state standards and testing, the nature of the discipline, and the culture of the teacher community within the school/university partnerships in action: Concepts, cases and concerns
- Teachers talk about teaching the test to other teaching the science they have identified as important

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Discussion & Implications:
- "We had never had that before, where we actually talked about how we were going to teach and reflect strategies and looked at each other’s" (High school math teacher, May 06)

Research Questions
To what extent were teachers in PLCs able to move toward an inquiry stance involving knowledge negotiation?

How did external forces influence the nature of teachers’ collaborative work?

Materials
Case study design (Herr, 1998)
9 PLCs selected for case study; 3 cases fully developed
Purposeful selection to represent science, mathematics, high school and middle school
Qualitative data sources:
- audio, video, and archival records of PLC meetings; semi-structured interviews with 10 lead teachers, focus group interviews with teachers from (5 non-case study) PLCs, informal interviews and conversations with PLC members, teachers, principal, district superintendents, and state administrators; audio and video recordings of PLC meetings

References


Cochran-Smith & Lytle, 1999). Grays Bay (above) and a handful of other PLCs, however, provided images of the existing school community (McLaughlin & Talbert, 2006)