

# Professional Development and Teachers' Construction of Coherent Instructional Practices: A Synthesis of Experiences in Five Sites

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## **Professional Development and Teachers' Construction of Coherent Instructional Practices: A Synthesis of Experiences in Five Sites**

The national systemic school reform effort has assumed that sending clear and consistent signals to teachers and students about what is important to teach and learn is an essential element of school improvement (Knapp, 1997). As a consequence, the focus for the past decade has been on creating and aligning policy instruments such as curriculum frameworks, standards, and assessments (Cohen & Spillane, 1994; Fuhrman, 1993; Goertz, Floden, & O'Day, 1996). Although those promoting systemic reform “seek much more coherent and powerful state guidance for instruction” (Cohen, 1995, p. 11), the experience of policy alignment in at least one state suggests that this strategy has yet to provide significant assistance for practitioners. Cohen said that while systemic reform brought a broad drift toward intellectually more ambitious instruction at the state level [California] for about a decade, thus far it has not brought more coherence to state guidance for instruction....The guidance for instruction that many local central offices offer to schools has begun to shift in the direction of reform, but that shift has so far not been accompanied by greater local coherence...Reforms that seek more coherence in instructional policy have helped create more variety and less coherence....State guidance added messages, but so did local agencies. Nothing was subtracted. (p. 12)

Hargreaves (1994) described similar paradoxes that create challenges for teachers working in an increasingly complex world. Situating the work of teaching in the wider social context, Hargreaves argued that teachers are being asked to do more, but with less time and support to learn how to meet the new demands. It is worth hearing Hargreaves' argument in full.

First...the teacher's role expands to take on new problems and mandates—though little of the old role is cast aside to make room for these changes. Second, innovations multiply as change accelerates, creating senses of overload among teachers and principals or head teachers responsible for implementing them. More and more changes are imposed and the timelines for their implementation are truncated. Third, with the collapse of moral certainties, old missions and purposes begin to crumble, but there are few obvious substitutes to take their place. Fourth, the methods and strategies teachers use, along with the

knowledge base which justifies them, are constantly criticized—even among educators themselves—as scientific certainties lose their credibility. If the knowledge base of teaching has no scientific foundation, educators ask, “on what can our justifications for practice be based?” What teachers do seems to be patently and dangerously without foundation. (p. 4)

Recent reform efforts have had but minimal impact on classroom progress. Teachers are making instructional decisions in a more fluid context that includes new policies, new ideas about learning, instruction, and assessment, and many programs that claim to reflect these new ideas. The multiplicity and diversity of messages about improving classroom practice only confounds the decision-making process for teachers. Teachers interpret these messages in very different ways depending on their experiences, beliefs, students, and school culture. Thus, the way a particular reform program is implemented will vary greatly from teacher to teacher and may be quite different from the expectations of the reformers (Jennings, 1996; Grant, Peterson, & Shojgreen-Downer, 1996; Peterson, McCarthy, & Elmore, 1996). From their study of teachers and a mathematics curriculum reform, Grant et al. (1996) concluded that teachers are not adequately supported in their efforts to make connections between new ideas presented as reform and the enactment of these ideas into practice.

Some educators have cautioned that school improvement will only be achieved when there is greater clarity and coherence in the minds of the majority of teachers (Fullan, 1996), and that “coherence in policy is not the same thing as coherence in practice” (Cohen, 1995, p. 16). From this perspective, educational practice will change only when teachers have the support they need to make sense of new ideas and directives, bring them together in a meaningful way, and construct a coherent practice.

In the new reform climate, it appears teachers have little time and less guidance to learn—or rethink and relearn—how to make the best decisions about what and how children learn. Many teachers, therefore, make instructional decisions based on their immediate needs to comply, survive, conform, or meet a time constraint (Hargreaves, 1994). It is easier for them to rely on external sources of authority, such as curricular documents, assessments, textbooks, and teachers’ guides, to provide the guiding vision for their instruction than to rethink and reform that practice. Reliance on these materials, which are designed for use across a large number of classrooms by a diverse group of teachers with some typical student, *can* promote teaching that is routine and unthinking. Yet, as Coldron and Smith (1995) contend, “teaching which is routine and unthinking sells pupils *and teachers* short [italics added]; learning to teach and sustaining professional development require reflection which is closely linked to action” (p. 1).

In a similar vein, Elmore (1996) argued that changing the structures of schooling will have little impact on how and what students learn unless there are also changes in the “core” of educational practice (i.e., how teachers understand knowledge and learning and how they operationalize their understandings). Therefore, what Cohen (1995) calls “coherence in practice” depends more on how teachers understand, interpret, and internalize the reform messages for their own practice than on the alignment of those messages at any policy level.

The success of school improvement thus rests squarely on teachers, and, by association, on those responsible for supporting their professional growth. Darling-Hammond (1996) said that “betting on teaching as a key strategy for reform means investing in stronger preparation and professional development while granting teachers greater autonomy...we must put greater knowledge directly in the hands of teachers” (p. 5, 6). The challenges are to create the time for teachers to engage in their own learning, place value in that learning, and develop useful and effective strategies to help teachers learn how to make the best decisions in their teaching practices. Researchers have found that teachers who have opportunities to dialogue, study, and reflect on teaching and learning with their colleagues seem better able to improve their practices (Lieberman, 1995; Wilson, Peterson, Ball, & Cohen, 1996). As a result, there has been a recent shift from professional development models emphasizing “acquisition of discrete skills and behaviors” to more complex models emphasizing teachers learning in professional communities (Little, 1997, p. 2) and enabling teachers to become more reflective practitioners.

### **Problem**

When teachers can devote the time and effort to make sense of new conceptions underlying reform initiatives and programs, they will likely increase their understanding of contemporary educational ideas and issues. This puts them in a better position to examine, critique, and improve their own practice. One idea commonly embraced by researchers and reformers, for example, is the constructivist learning theory, which is a radical departure from views of learning held by the majority of teachers. The educational system does not typically accommodate or promote the kind of deep rethinking that is necessary for teachers to understand constructivism and its implications for teaching. Teachers may, however, be involved in the implementation of a new program or curriculum that is based on constructivism. Without an understanding of this theory of learning, they make changes to their practice at a fairly superficial level and, thus, may not achieve the results envisioned by reformers.

Although understanding ideas such as constructivism will help teachers create new knowledge of teaching and learning, they still need to be able to take the next step and consider these ideas in light of their daily context. Ball and Cohen (1999) discussed teachers' learning, saying

The knowledge of subject matter, learning, learners, and pedagogy is essential territory of teachers' work if they are to work as reformers imagine, but such knowledge does not offer clear guidance, for teaching of the sort that reformers advocate requires that teachers respond to students' efforts to make sense of material. To do so, teachers additionally need to learn how to investigate what students are doing and thinking, and how instruction has been understood...The best way to improve both teaching and teacher learning would be to create the capacity for much better learning about teaching as a part of teaching. (p. 11)

So, in light of the many new ideas, theories, and agendas that are part of contemporary efforts to reform or improve schools *and* the specificity of individual school contexts, the problem for this study is: How can teachers be supported in developing the understanding necessary to make coherent instructional decisions that promote student learning?

Following an extensive literature review,<sup>1</sup> we identified several assumptions that would guide our work on this problem: (1) teachers are learners and professionals who construct their own knowledge of teaching and learning; (2) dialogue, inquiry, and reflection are professional activities that can promote teacher learning; (3) teachers should be partners in generating knowledge of teaching; and (4) teachers can develop a stance toward instructional decision making that is clearly focused on students and learning. We proposed that teachers who are able to bring the components of the system—curriculum, instruction, assessment, external mandates, and community context—together intentionally with a focus on student learning have created what we are calling “instructional coherence.” Such coherence leads to improved educational experiences for learners as teachers make their instructional decisions by using both information collected in the classroom about what and how their students are learning and information from external sources about what is important for students to learn.

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<sup>1</sup> A review of the literature that formed the basis of the work is available in the annotated bibliography: Finley, S. J., with Ferguson, C., Clark, G., & Marble, S. (1999). *The Promoting Instructional Coherence Annotated Bibliography*. Austin TX: Southwest Educational Development Laboratory. Also available on-line at <http://www.sedl.org/pitl/pic/bib.html>

## Methodology

To explore the problem, we undertook a collaborative, qualitative research and development effort under the general umbrella of the constructivist paradigm. Constructivism as a research paradigm in the social sciences has the following positions: (1) realities are apprehensible as the multiple, sometimes conflicting, products of human intellects, which may change as their constructors become more informed or sophisticated; (2) knowledge is created in interaction among investigator and respondents; and (3) individual constructions can be elicited and refined through interaction between and among the investigator and respondents (Guba & Lincoln, 1994).

We used facilitated teacher study groups as a mechanism to engage teachers in an examination of their choices about curriculum, instruction, and assessment. From the beginning, the project was a collaborative effort between the project staff, educational consultants in the field, and teachers at the research sites. The notion of instructional coherence has not been well developed in the research literature. We had some ideas about coherence, but were convinced that we had to learn from and with the teachers in order to understand the issues, develop ways of thinking about coherence, and create approaches to support teacher learning that would be useful in schools. Our work was influenced by the research team of Cochran-Smith and Lytle (Cochran-Smith, 1994; Cochran-Smith & Lytle, 1990, 1992, 1999; and Lytle & Cochran-Smith, 1992, 1994), Cole (1989), Cole and Knowles (1993), and Day (1991), among others.

Five diverse school and district sites (rural, suburban, and urban) were selected. A study group of 12-18 individuals (primarily teachers) participated at each site. The teachers were “ordinary” or average classroom teachers (Elbaz, 1990), rather than teachers who had been identified as master or exemplary teachers or who were selected based on specific criteria such as writing ability. Teacher-participants volunteered, and they received a small stipend to compensate for meeting after school or on weekends. Each group met regularly to talk about teaching practice. These meetings were facilitated by a project researcher or her partner (a consultant from a local university or service center who was interested in our approach to teaching improvement, had experience in professional development, and had some relationship with the site or some of the teacher-participants at the site).

We used records of conversations as data to understand the experiences of teachers and the meanings they attached to these experiences (Carson, 1986; Clandinin & Connelly, 1994; van Manen, 1990). The groups met for 16 hours or more during each of the two phases of the study. Field notes from the meetings provided one source of data. Each teacher reacted to the study

group conversations in a personal journal, and the journals provided a second source of data. We had conversational interviews with most participants, which were taped and transcribed and formed the third source of data. Additionally data sources included field notes from classroom visitations and informal conversations with teachers.

During the study, we met with the consultants as a group several times to discuss what was happening at the five sites, discuss problems encountered at any of the sites, refine strategies for working with the study groups, review data, and develop deeper understanding of coherence. The conversations moved all of us—researchers and consultants—to a clearer and more unified vision of coherence in practice as we shared our different perspectives on the issue. This group collaboration was a critical aspect of the study, as were individual reflective conversations with our consultant partners and the debriefing sessions with study group teachers.

The study was conducted in two distinct phases. The exploratory phase, or first phase, of the study (winter 97 to spring 98) helped us learn about the challenges and issues facing teachers in bringing together curriculum, instruction, assessment, external mandates, and community context in a meaningful way to support improved student learning. Each group started with a consideration of student learning. Participants reflected on issues raised in the video, *The Private Universe*,<sup>2</sup> as they began to explore how children learn. Through the open-ended conversations about learning and teaching, issues of improving their practices emerged. We collected data on what they talked about and how they talked about it. The findings were used to create a vision of coherence and develop tools and strategies that could support teachers in improving teaching practices.

The second phase of the study (fall 98) was an investigation of the usefulness of the tools and strategies developed to address a focal question at each site. The study group sessions were somewhat structured as participants engaged in guided conversations, activities, and classroom actions. However, each group followed a unique path. The final product of the project<sup>3</sup> is a collection of tools, strategies, and resources that were found useful in supporting teachers' work toward constructing more coherent practices.

The purpose of the study was to identify issues of coherence and create and evaluate tools to enable conversations among practitioners about these issues and related ideas and practices. It

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<sup>2</sup> *The Private Universe*, a videotape available from Pyramid Film and Video, P. O. Box 1048, Santa Monica, CA 90406, was produced by the Annenberg/CPB Math and Science Project.

<sup>3</sup> The Promoting Instructional Coherence Project. (2000). *A Flashlight and Compass: A Collection of Tools to Promote Instructional Coherence*. Austin, TX: Southwest Educational



was expected that engaging in reflective and thoughtful conversations would lead teachers to improve practice as they developed deeper understanding of coherent practice; however, the study did not attempt to analyze the progress or amount of improvement made by individual teachers. We do have anecdotal evidence that teachers who participated in the study did become more thoughtful about their practice and most participants reported making specific changes in their classrooms to better focus on learning and the learner.<sup>4</sup> This paper reports on what we learned from the study.

### ***Summary Description of Study Group Sessions at Five Sites***

Five diverse school or district sites were selected, one from each of five southwestern states.<sup>5</sup> The sites<sup>6</sup> are described below, followed by a brief synopsis of the work at each site, which illustrates the kinds of issues and dialogues that emerged over the course of the two phases of the study.

- Aspen—In this rural district, all 14 of the K-8 teachers, and the elementary principal, the librarian, and the counselor participated.
- Linden—In this urban school that has two campuses, one principal and 17 K-8 teachers participated.
- Mesquite—In this suburban school district, 12 K-6 teachers from two adjoining schools participated.
- Oak—In this rural district, 2 principals and 15 K-12 teachers from 6 schools participated.
- Tupelo—In this suburban district, a district curriculum specialist and 15 K-8 teachers from 10 different schools participated.

#### **The Aspen Site**

**First phase of study.** Having open-ended professional conversations was a new experience for the teachers in this group. They were feeling overwhelmed by new state mandates coupled with implementation of the many new programs purchased by the district, and they seemed to expect the project to provide them with quick-fix answers to their problems in meeting the new demands. By the end of the semester, however, they reached some consensus on the need to establish models of quality student work and to more consistently communicate expectations to students and parents.

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<sup>4</sup> Some of the teachers' stories are included in *Restoring Meaning to Teaching* by Finley et al, published by Southwest Educational Development Laboratory in 1999.

<sup>5</sup> Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

<sup>6</sup> The names of the sites are pseudonyms.

**Second phase of study.** The study group meetings were given status as “official” professional development. Therefore, other staff often attended, which disturbed the safe environment for honest dialogue that had been established the previous year by the original group. The study group focused their inquiry on assessment and quality. They explored relationships among assessment, expectations, and student performance; examined student work; and discussed their ideas of quality. While critique of the study group process was mixed, teachers did request that the group continue for another year.

### **The Linden Site**

**First phase of study.** Teachers initially struggled with identifying the “task” for this group, but soon focused their conversation on whether or not they were meeting the needs of their students. They talked about how a recently adopted arts-based curriculum could help them engage all students. It was a revelation to them that they did not share a common understanding of the arts project. As they examined the program more deeply, they learned about one another and developed as a learning community. They repeatedly questioned how they could know what their students had learned.

**Second phase of study.** The group focused on the development of classroom assessments to help with instructional decision making. They explored new ideas in assessment, tried them out in their classrooms, and talked about the results in the group meetings. The discussions were highly reflective as these teachers adopted an inquiry stance toward their practice. Over the semester, they grew as a learning community, openly sharing student work and visiting each other’s classrooms. Some teachers in the group attempted to spread their excitement and engage other staff in this learning process, but they met resistance from some teachers. The next year, however, they decided to lead a book study and had 35 staff participating.

### **The Mesquite Site**

**First phase of study.** The teachers welcomed the opportunity to spend time together and were not concerned about a focus for their conversations. An article on collegiality was especially meaningful and stimulated conversation about teacher isolation and the lack of a professional community in their schools. The topics of their conversations were fairly diverse as they learned how to be professional colleagues who shared their ideas and experiences. The teachers refined their ability to ask questions about the purposes of the strategies they were using or seeing in other classes.

**Second phase of study.** The group focused on purposefulness or intentionality in teaching by looking at their decision-making process. They explored the notion of teaching as storytelling and used a simple framework to identify the purpose, importance, and completeness of a lesson. The group also created a list of questions to critique lessons and guide their planning, identifying three aspects that contribute to purposeful teaching: the personal and professional life of the teacher, the social relationships in the classroom, and the instructional strategies utilized. They felt that their questions would help them focus on the bigger question of “what am I doing and why?”

### **The Oak Site**

**First phase of study.** The teachers believed that the district was experiencing less student success because the population had changed. They placed the responsibility for student success on parents and students because they considered teaching as a matter of presenting material and learning as the students' responsibility. The teachers seemed reluctant to carefully examine their own assumptions and practices or to accept their own accountability for student learning although the façade was beginning to be chipped away by the end of the semester.

**Second phase of study.** The teachers' thinking about teaching and learning was challenged when they did an activity on student assessment that simulated student experiences in assessment and made it very clear how specific teacher behaviors can affect students. The resulting conversations triggered a change in the general viewpoint of the group, as they focused on a broader teacher's role in student learning that extended beyond mere presentation of material.

### **The Tupelo Site**

**First phase of study.** The group expected to develop a science curriculum from a commercial package of modules purchased by the district. The teachers struggled to make sense of how the science modules could be used as a curriculum and how to fit the modules with the new state standards and their existing textbooks. With some encouragement, they set aside their task and discussed their students' needs, beginning with an exploration of learning theories. They made some decisions about the science curriculum, but felt that it would have minimal value for the district.

**Second phase of study.** The group began the semester with a renewed focus on understanding learning and how it happens. They tried to identify a set of learning principles, but got mired in educational jargon. At subsequent meetings, however, they reflected more deeply on the question, engaged in intense conversations about learning, and participated in additional activities that helped them clarify their assumptions and understandings. They constructed a set of learning

principles that they could use to critique their instructional design and tested it in their practice. Teachers concluded that their instruction could be more focused on learning needs of students.

## **Findings and Discussion**

### **Group Characteristics**

We examined the data holistically, reading and rereading the notes, transcripts, and journals, and discussing the data among ourselves and with our consultants. We initially concentrated on the notes from the group meetings. We found that the five study groups had ways of talking and acting that influenced the extent and pace of the group's movement toward the goal of constructing deeper understandings of learning and classroom practice. In the first phase of the study, we were especially interested in determining if teachers in the groups that had more reflective dialogue were constructing knowledge related to coherent practice. That is, were teachers in these groups making connections, seeing interrelationships, and developing the understanding that would support taking a stance toward instructional decision making that is clearly focused on student learning. This information would be critical during the second phase of the study when we would develop and use strategies to help the teachers develop more reflective and thoughtful group dialogue and individual practice.

We found that the groups initially fell along a continuum from relatively unproductive to more productive ways of working. Rather than consider the endpoints as dichotomies between good and bad, we saw these as tensions between our theoretical ideal and what was more commonplace in the field. Without the tensions, we would have learned little about supporting teachers learning in community or about coherence. Johnston and others (1997) talked about productive tensions in their work with school-university partnerships, saying, "when there were differences, we had to reflect, compare, and adjust our thinking...in this interpretation of tensions, we assume a necessary relationship between differences...we look for interrelatedness. Like the north and south Poles of a magnet, the differences interact in ways that make them interdependent" (p. 13). In much the same way, we could identify two poles in the ways that groups worked together. While we would advocate for movement toward one pole, our work with the groups helped us understand that the tensions are not to be resolved, but managed. Some of these tensions are described.

### **Task-focused to Dialogue-focused**

During the early part of the study, we found that the groups had varying degrees of difficulty negotiating the open agenda of the study group design. When recruiting teachers to participate in the study, we had described their participation as an opportunity to talk with colleagues about

teaching and learning and to work with us to understand issues faced by practicing teachers. However, it seemed that they were not used to talking about issues in an unfocused format. It was more common for groups of teachers to get together to solve a particular problem or complete a specific task.

The group of teachers at one site came into the first meeting with one task in mind—evaluating the science modules and assigning activities to the appropriate grade level to create the district's science curriculum—despite the fact that everyone involved at the site had agreed to blending the dialogue-reflection aspect of the project with the district task. In the meetings and journals, numerous references were made to the need to get things done quickly, to complete the task. In one meeting, there was a mini-rebellion when the group collectively said, “Enough of the touchy feely stuff! Let's get real.” For them, getting real met focusing their attention on the selection of modules. However, before very long, they realized that they needed a better understanding of science learning in order to make good choices.

The group at another site was different in its approach. The teachers just wanted to talk and, at first, they tended to be “venting” rather than reflecting. Group members said that they needed the time to be together. When one teacher suggested organizing the meetings in longer blocks, “so we can get it over with,” another teacher said, “Get it over with? This is what I want and need to do.” The group agreed. Although they resisted settling on a focus for study, their conversations became progressively more reflective and insightful, perhaps because of the value they placed on having these conversations.

This tension between being task-oriented and being dialogue-oriented provides a good example of the interrelatedness of the two poles. Neither reflection without action nor action without reflection will produce lasting improvement in teaching practice. In the second phase of the study, the first group moved toward more reflection and dialogue about how children learn, and they did make significant changes to improve science teaching practice. The second group made the decision to look more closely at what they were choosing to teach, with an eye toward purposefulness, and individuals made changes in their decision-making process in light of the group study. Balancing reflection and action are critical in developing strategies to support teacher learning and teaching improvement. From the teachers, we learned that without taking the time and effort to understand learning, teachers cannot use it as a focal point for action to improve classroom practice.

### **Placing Blame to Taking Responsibility**

We found that when teachers first came together to talk with colleagues, it was typical for them to blame low student achievement or classroom problems on external factors—society, tests, standards, the state, central office, student preparation, and so on. Each site exemplified this tendency to some extent.

Teachers at one site felt that if parents had better parenting skills, made better choices, and sent their children to school ready to learn, then teachers could teach students as effectively as they had in the past. They felt that students were different from those they used to teach, saying that today's students are less mature, lack curiosity, and are generally lazy and disrespectful. All groups spent time “venting,” and some teachers were more tenacious than others in their placement of responsibility outside of themselves. When teachers were not able to consider their own role as pivotal, a barrier was created to reflective dialogue about and improvement of their practice. This essentially became a mechanism for maintaining status quo.

Another of the groups exemplified the other pole. From the beginning, the teachers questioned how well they were meeting the needs of the students, teaching the content, understanding and implementing the arts-based curriculum, and using student data to inform practice. They were concerned that the criteria for identifying students for the gifted program might not be valid. This concern led to an examination of their own classroom assessment practices and a study of alternative methods and uses of assessments to benefit students. If a teacher blamed outside forces for her problems in the classroom, it was short-lived and not reinforced by the group.

In a study of the ways teachers think about diverse students, Greenleaf, Hull, and Reilly (1994) found that groups of teachers working together could “both challenge and reinforce the harmful view of students” (p. 536). In some groups, there was the tendency to reinforce negative views of parents and students, whereas in others, the tendency was to challenge and talk about negative views and figure out how to improve the situation. This tension between placing blame and taking responsibility points out the need to create situations or activities to enable those teachers who were stuck in the blaming phase to move on and accept responsibility for what they could change. The following exchange between a third-grade teacher and the site consultant illustrates a teacher who is beginning to better understand blame and responsibility. Questions from the consultant played a pivotal role in helping the teacher accept her own responsibility. The group was talking about being constrained by tests and the curriculum.

*Teacher: They sit down to write the curriculum that we have to teach.*

*Consultant: Who is they?*

*Teacher: The state, the district curriculum director.*

*Consultant: So they write the curriculum and then become the "curriculum police?"*

*[laughter] No, really, do they make the curriculum?*

*Teacher: Yes, there is a curriculum. There are these ten things I have to cover in science.*

*Consultant: So what have you covered? [This meeting is in March]*

*Teacher: Well, I haven't really done many of those because I have other science units that I like better for the kids. [pause] Oh, I guess I do make the decisions.*

*Consultant: So maybe thinking of curriculum as what we do in our class with our students would help us in our thinking about practice and how we decide what to teach.*

The group went on to talk about their responsibility to make thoughtful decisions. In a later journal, this teacher writes, "what can I change in my classroom to improve it for kids...I can make my classroom more of an environment for discovery and exploration."

There is interrelatedness between the two poles. Arguments based on student and parent deficits or constraints from external mandates did not lead to problem solving. However, this kind of talk allowed teachers to admit that their practice was troubling them without requiring too much revelation of their own insecurities or failures. This seemed to help the group to develop the trust necessary to enter into a learning relationship with one another where they could expand their understanding of teaching and learning.

### ***Focus on Teaching to Focus on Learning***

Most of the early conversations in all of the study groups indicated that the teachers were thinking about their practice from the perspective of teaching rather than from the perspective of learning. Those with a focus on teaching would say, "I teach this content" or "I teach in this way." If they had a focus on learning, they might say "This is content that is important for my students to learn" or "These experiences would help my students learn this big concept." The groups that were more focused on dialogue, reflection, and responsibility soon understood the subtle difference between focusing on teaching and focusing on learning and could explicate that difference in their conversations and would ask each other, "but what does that have to do with learning?"

The teachers in some groups generally expected the program to tell them how to teach in order to meet the various requirements of the state and district. They viewed the researcher as an expert who would give them the answers. One group talked about finding and using different teaching strategies and needing to take time to "teach it over again." One teacher wrote, "I feel that getting a check list designed and printed for my class in all subjects will be far more useful to me as a teacher than reading about different learning styles." Another teacher in the same group noted, however, that "sometimes as teachers we focus too much on teaching and are not aware of the

learner learning the materials.” Her comments were not characteristic of this group, and she did not verbalize her feelings until later in the project.

While the teachers at one site started with their focus on teaching strategies and materials, they were willing to struggle with the notion of focusing on learning. They discovered for themselves that they were describing teaching even as they constructed a list of learning principles. The dialogue as they negotiated the language to rewrite their learning principles was insightful and connected to practice. The evidence suggests that some groups were able to make greater progress because they either were or became a reflective group focused on learning.

### **Seeing Curriculum, Assessment, and Instruction as Separate Problems to Seeing Relationships**

In early dialogues, teachers talked about curriculum, assessment, and instruction as separate issues, whereas later they considered the connections between them. Groups typically began with a concern about one of the three—curriculum, assessment, or instruction—and this may be important in preventing the group from feeling overwhelmed. A group could take on an investigation of assessment, for example, which in turn led to opportunities for teachers to discuss its relationship to curriculum and instruction. As a group progressed to a greater focus on student learning, they were better able to understand and consider the importance of making the connections between curriculum, assessment, and instruction. It also worked the other way. An understanding of the connections helped a group see the need to focus on student learning. They saw that the establishment of clear learning targets when designing a classroom assessment, for example, had to be done in conjunction with selecting important content for students to learn and appropriate instructional strategies to support their learning.

It is easy to see that the tensions themselves are highly interrelated and, taken together, show the influence of a school culture on teacher learning. This leads us to a discussion of our findings on the influence of the group work on individual teacher's development of a more sophisticated understanding of learning and a more coherent approach to practice.

### **Teacher Learning**

Teachers' reflections about their practice can be categorized in many ways. Since we were interested in the coherence of their practice around student learning, we focused primarily on their comments about curriculum, assessment, and instruction. The decision to do this came from a meeting with the consultants at which we explored our early conceptions of coherence. Much has been written about the need to align curriculum, assessment, and instruction so that students receive a coherent message about what is important to learn and are assessed in a manner



consistent with instruction. The teacher-participants, like all teachers, make daily decisions about what to teach, how to teach it, and how to assess their students' learning. They talked in the study groups about different pressures they felt impacted their practice and their decision-making. They make decisions using a whole array of information, materials, and requirements, from state and local standards to textbooks and packaged curricular modules; from state assessments to teacher-made tests; and from instructional strategies learned in college or at workshops to those learned from the teacher across the hall.

We felt we would learn about the way the teachers fit these pieces together by examining how they talked about curriculum, assessment, and instruction. We added one other category to our list—their professional vision of teaching—because we believed that teacher learning and professional development were critical aspects in developing what we were calling instructional coherence. Therefore, we initially sorted data into the following four categories or domains:

- **Curricular Context:** How does the teacher decide what to teach? What are the influences on what she teaches? How does she talk about national, state, or district standards?
- **Assessment and Student Data Use:** How does the teacher know what his students have learned? What does he know about his students and how does he know this? How does he use student data and test scores in instructional decision-making?
- **Instructional Practices:** How does the teacher talk about her instructional strategies? How does she decide what approach to use?
- **Professional Vision of Teaching:** How does the teacher talk about the profession of teaching? How does he view the study group and the process of learning with colleagues? How does he view professional development?

We next examined the data for emergent themes. We identified six themes that were related to the development of more coherent teaching practices. These themes extend across the four domains. As the project progressed, we found that the participating teachers increasingly

- justified their decisions by relying on their own expertise and that of colleagues;
- felt that they could have a significant impact on student learning;
- viewed teaching as a profession rather than as a job;
- valued dialogue with their colleagues as a learning experience;
- believed that learners construct knowledge; and
- utilized approaches to instruction that were consistent with their understanding of learning.

The themes above describe endpoints of a continuum, so we called them dimensions.

Looking at the first dimension, we can see that it extends across the four domains. One issue for teachers was deciding whom to listen to among the many voices telling them what to do. At the beginning of the project, we saw more teachers who relied on external sources of authority for each of the domains. For example, a teacher might follow a textbook as the external source of authority for curriculum, saying that the experts who wrote the textbook knew what was important to teach and in what order and depth topics should be covered. This teacher might use the teacher's guide to the textbook as the source of authority for instructional strategies to use to teach science, and the textbook exams as the sole means of assessment, again deferring to the experts who developed the strategies and examinations. This teacher's vision of teaching is related to how well the lessons are taught, as determined by a supervisor's evaluation. At end of the project, we saw that more teachers justified their decisions about classroom curriculum, instruction, and assessment by relying on their own expertise. These teachers also became more confident in critiquing their professional learning needs. Another example illustrates how the dimensions crossed the four domains. When teachers took a professional view of teaching, they took it as their responsibility to examine, discuss, critique, and modify their curriculum, instructional practices, and assessments to make sure they were focusing on student learning. They did this in the professional community of colleagues. Each dimension then indicates a way of thinking about the domains.

The dimensions aligned very well with the theoretical construct of "stance" as the positioning involved in teaching (Berghoff, 1997; Cochran-Smith, 1994). In an essay about stance and teacher education, Berghoff looked into the use of the concept and found that it generally refers to "how we position ourselves in a given context" (p. 3). Stance has been used in the field of literacy since 1938 when Rosenblatt described a reader's relationship to a text as either an efferent stance (to gain information) or an aesthetic stance (to have a lived-through experience) (Berghoff). More recently, Langer (1991) described four major stances or relationships that a reader takes toward a text, with each stance adding a somewhat different dimension to the reader's growing understanding of the text.

Berghoff (1997) explained that the essential idea behind the notion of stance, a concept not restricted to literacy research, is that there are

multiple positions possible in any context, each with its own set of possibilities, but none with the potential for exposing everything...Stance is a relational concept. One can only assume a stance in relationship to something or someone. As teachers, we

assign students a position relative to ourselves when we assume a stance...It makes a difference where we choose to stand. (p. 4, 8)

So stance is also about being intentional, about consciously choosing a position (Berghoff). We are socialized into a culture and belong to discourse communities (or social systems) within that culture and, as such, we are also “socialized into a stance, an ideological position or orientation, that is suited to the discourse in which we participate” (Berghoff, p. 6). However, we are not trapped and, once aware of multiple perspectives, can intentionally make choices that change our position or stance.

Cochran-Smith (1994) talked about teacher research and the development of a different stance toward being a teacher. She said

The power of teacher research can only be regarded in terms of its value as a vehicle to help student teachers develop a stance—that is, a way of positioning themselves as prospective teachers...in relation to (a) knowledge (i.e., their positions as generators as well as users of knowledge for and about teaching), (b) agency (i.e., their positions as activists and agents for school and social change), and (c) in terms of collaboration (i.e., their positions as professional colleagues in relation to other teachers, to administrators and policymakers, and to their own students). (1994, p. 151, 152)

She described a program intended to help students develop a “stance of teaching against the grain.” Cochran-Smith and Lytle (1999) later talked about “inquiry as stance” to describe the positions taken by teachers working together in inquiry communities toward knowledge and practice.

Marble (1997) expanded this view, adding that “‘stance’ includes more than simply relative position; it also connotes attitude” (p. 61). Stance is not simply a place to be looking from, as in point-of-view in literature, but rather a way of thinking about. He described a program in which student teachers created school portraits as a research project. The portrait experiences were described as “intense, emotional learning activities with high stakes implications for the learners...Each of the portrait teams chose a different point of view for their research outside the typical perspective of teachers” (p. 60-61). Through the process, they became generators and pursuers of knowledge, rather than receivers of knowledge. They learned that there are “multiple ways of knowing and understanding any particular event or situation” and were, thus, “no longer tied to the search for the correct way to teach” (p. 61-62). They constructed their own knowledge about schools and schooling. Marble considered stance as the development of a relationship, in the above example, to knowledge. He contends that by understanding that they had generated new knowledge of the schools, the student teachers’ attitude toward teaching and learning

shifted. If students in their classes were also seen as active knowledge constructors rather than passive receivers of knowledge, different teaching actions were necessitated.

Stance implies taking action and provides a way of exploring the importance of the themes we saw in this project. Taking the perspective of stance, we approached the dimensions as a way to describe the teachers'

- Stance toward authority
- Stance toward agency
- Stance toward professionalism
- Stance toward collaboration
- Stance toward knowledge
- Stance toward instruction

These dimensions will be discussed in some detail. Each stance can be seen as a way of thinking about the four domains—curriculum, instruction, assessment, and professional vision—and each adds a different perspective from which to examine and take action on these domains. We found that, taken as a whole, the comments teachers made in the meetings or in their journals formed a continuum of perspectives on the six dimensions. Over time, we saw progression from comments that were less reflective to those that were more reflective, from those that were less coherent to those that were more coherent, and from those that illustrated less understanding to those illustrating more understanding. This suggests that paying attention to these “qualities” can help us learn how to support teachers in generating a deeper knowledge of learning and teaching and in constructing coherence in their practice.

### **Stance toward Authority**

Teachers often justified their decisions about curriculum, instruction, and assessment by relying on sources of authority that were external to themselves, such as textbooks or state and local curriculum guides, frameworks, standards, or assessments. One teacher said she thought that it was industry that told teachers and schools what to do. Early in the project, it was common to hear short comments about authority that suggested little questioning of the appropriateness of the source.

*I teach what's in the framework.*

*I use the adopted texts plus the materials that the district contributes. Everything hinges on the AP test.*

*Curriculum is dictated by the book because of the sequential order of the explanations, it is hard to take them out of order.*

One teacher who was new to her district, was looking for these sources of authority when she asked, "I want to know why this district does not have curriculum guides for every subject like every other place I've ever been?"

Some teachers talked about the standardized test and, while they seemed unhappy about the influence of the test on their teaching, there was little to indicate that they saw how to change their response.

*I follow the [national test]. I don't agree with it. It is only testing how well you take a test.*

*I don't believe true student-centered learning will occur as long as the state test is around...it has limited my teaching.*

Later in the project, it was more common for teachers to emphasize their own role in making sense of the standards, curriculum, assessment, and instruction. Some of these teachers developed understanding through involvement in the project, while others already had confidence in their own authority and expertise. One teacher explained how dialogue with her colleagues influenced her stance to authority.

*I followed the teacher's manuals faithfully. I figured that these people had done a lot of research and knew more than I did, so use it. Now, I have more confidence in me. Having the time to talk to other teachers and hear their views has helped me to have the courage to try some different things. Now, my objective before I begin a lesson, is that both my students and myself know what is important and what is expected of them and from me.*

She talked about gaining the confidence and courage to make her own decisions. Others talked about how they had made sense of the balance between external and internal sources of authority.

*When I first started teaching, I took out the curriculum book and kind of checked off things as I did them...now I use the NCTM standards as kind of a guide, how and what needs to be taught, maybe less the how—you can still teach in your own style and draw your content from the standards.*

*I try to balance the process orientation that I know is best for the kids with the real world of standardized tests. When it comes down to it they have to prove it for themselves and, if I don't do that and assist them with it, then I have failed because I haven't prepared them for the real world.*

*I am covering what the state wants me to cover not because the state wants me to cover it but because I think that is what ought to be done.*

This theme extended into the teachers' professional vision of teaching as well. One teacher told us *My thoughts at this point are that we as teachers must take primary responsibility for the learning that does or does not take place in our classrooms. The bottom line is that we are supposed to be knowledgeable about our subject matter, educated about the way people learn, excited enough to motivate our students, and someone our students like and respect enough to look forward to see everyday.*

Most teachers changed their position with regard to source of authority over the course of the project. We described one teacher's insights about curriculum in a previous section. She began with the reference to "they" who write curriculum, and she believed that she was constrained by this curriculum. This teacher relied on external authority, but felt resentful of the power that she perceived these authorities held over her. She said, "The test drives curriculum...and when I am insecure about what I am teaching, I go back to the textbook." Later she said, "The test has been driving my curriculum. I don't like it, it is not right." She talked the same way about instruction, saying, "In the first semester, I tried to do the reading program as it is supposed to be taught according to the training, but now I am making modifications." Near the end of the project, she said, "It is empowering to realize you don't have to teach everything in the book or whatever, that less is more...you don't have to do it exactly like everyone else...I am learning to stop saying 'they made us do this.' I can change, and I can change them." She became a leader during curriculum meetings at her school, changed many aspects of her practice, and learned to trust her own judgment.

Teachers who were more coherent in their approaches, or who became more coherent over the course of the project, justified their decisions by relying more on their own expertise and that of colleagues than on the dictates of external sources. They did not ignore those external sources that had meaning for them and made sense to them, but used them as guidelines. It seemed that their focus on students and student learning helped them to determine what to use and how to use it. Few teachers were explicit about this connection, but we heard it in their stories and anecdotes. One teacher described a lesson she developed with attention to both the state standards and the group's list of learning principles, ending with

*I believe this lesson covered all of our principles of learning. It was one of the most exciting projects I have done this year. Not in terms of teacher accolades (although they are nice) but the excitement, the effort, the feeling the boys had of accomplishment, even their frustration when the chosen experiment didn't work out. The learning was so great, the bell caught us still busy, oblivious of time. It was great to reaffirm that learning belongs to the student.*

This concept of authority is dependent on views of knowledge about teaching and who has the power to generate that knowledge. In the beginning of the project, most teachers thought of themselves as users of knowledge, which was generated by experts outside of their school. As teachers, they relied on the authority of those others to guide their practice. As the project progressed, more teachers recognized the value of the knowledge that they and their colleagues had gained through experience and, perhaps more importantly, through reflection on that experience. They should be able to, and have the authority to, make good judgments about their practice because they have this practical knowledge—this professional expertise. As teachers develop a stance toward authority that involves relying on their understanding of and focus on student learning, they also begin to feel that they have a significant impact on the learning that goes on in their classroom.

### **Stance toward agency**

We use the word “agency” to bring together the ideas of power and action. To develop a stance toward agency, teachers must believe that they have the power to take action and that their action will impact student learning. Some teachers in the study groups felt that they did not have a significant impact on student learning. One consultant told us

*these teachers were convinced that the children of today don't learn, don't want to learn, and will not learn. They blamed everything but themselves for the problem. I could not get them to really talk about how they are related to the problem.*

One of the teachers in this group confirmed this view when she said, “What are we seeing in the classroom today? Across the board, I am not sure what is causing student’s lower level. Work ethics? Peer pressures? Extra-curricular activities? Parent’s lack of interest?”

However, as this group talked and reflected, there were some who made a commitment to change practice, realizing their impact on student learning. Typical of the comments of these, one teacher said, “After some of the sessions, I go into class and want to be a better teacher. I want to assume some of the responsibility for why these kids don’t learn.” This comment was related to her professional vision of teaching. A teacher in another group talked about curriculum, saying

*I must defend my position and practice and explain to parents that although I don't use a text, that my curriculum continues to follow district policy which adheres to the NCTM standards. I also try to explain that I believe my program does more for student learning and understanding than the text does...it teaches reasoning and understanding and helps their child to become a better mathematician...I am convinced I am doing the best for my students and I have research to back me up.*

As the project progressed, more teachers talked about the impact of their actions on student learning, and began to do something about it. One teacher told us that she was “re-thinking the

ways I do things.” Another said, “I have been trying to look at my kids again, to see where their needs are, to figure out how to meet the needs of all of my kids.”

By the end of the project, almost all of the teachers felt they had the power and responsibility to take action within their classroom to improve learning for children. One teacher summed up the idea of stance toward agency when she said, “I see many students who came to middle school so convinced they couldn’t do, couldn’t learn, couldn’t succeed academically...I wonder how many of us realize the depth of our influence.” Another teacher talked about the importance of her understanding of learning.

*The greatest ah-ha was turning instructional principles into learning principles. I ask myself, what can I do to guide them to learning, but it is not my show. I am more learner-centered, not so teacher-centered, so now I tell myself, “don’t talk so much, let them do more.” I pulled out all of my files of winter activities and sifted through them, deciding what were the main things for kids to know and getting rid of some of my favorite “cute” things. Now I personally decide and have ownership.*

Cochran-Smith and Lytle (1999) said that, “when teachers work in inquiry communities, they enter with others into ‘a common search’ for meaning in their work lives” (p. 294). For the teachers in our project, they came to define the meaning in their work lives as coming from the impact they were having on student learning. They were making clearer connections between student learning and their teaching strategies and could explain their choices to others. As the teachers developed a stance toward agency of having impact on student learning, they began to consider themselves more as professionals.

### **Stance toward professionalism**

The teachers sometimes talked about teaching as a job, and, at other times, as a profession. Darling-Hammond (1996) described the professional teacher as “one who learns from teaching rather than as one who has finished learning how to teach” (p. 9). Professionalism, according to Darling-Hammond, involves inquiry centered on critical activities of teaching and learning that grows from investigations of practice and is “built on substantial professional discourse that fosters analysis and communication about practices and values” (p. 9). Therefore, we would expect teachers who viewed teaching more as a profession than a job to talk about inquiry, analysis, reflection, learning with colleagues, and making thoughtful decisions about curriculum, instruction, and assessment.



It was apparent that the teachers had a vision of what it was to be a professional, as evidenced by their concerns about what was happening to the profession and to them as teachers.

*I wonder how often we come across to our students as being bored with our jobs. Do we convey a sense of excitement about teaching? Or do we always act as if it is a tedious chore we must simply get through in order to draw a paycheck?*

*As it is, we do the hierarchy of needs—we do the classroom first—and don't have time for the other stuff like getting together as professionals.*

*I think what happens to most teachers is that we are given a few pieces of methodology from a variety of sources and told to put them together in a coherent manner. We are expected to perform a variety of services and meet certain criteria and of course, prepare the students to function in a world that is changing so rapidly no one can keep up. No wonder teachers are stressed out.*

*One huge concern that I have is the chore of being a teacher compared to the joy of teaching is beginning to take over the profession of being an educator... I really think that educators should be constantly checking their students' comprehension, skill development, and understanding.*

As the project progressed, we heard the theme of professionalism emerge as it related to curriculum, instruction, and assessment. A more professional attitude is shown when a teacher takes responsibility for her own learning and has a clear understanding of how she can best improve her practice. Early in the project one teacher told us,

*What I want to do is be sent to a workshop this summer for math...I would like to be sent to a workshop on hands-on science...I would like to go to a social behavior workshop...I guess I just want to get an array of ways of teaching.*

She did not seem to have a plan nor was she clear about her role in her learning. Later in the project, she said, "This group has been the most important thing I've done this year." She went on to describe how the group had helped her learn how to make better curricular decisions for her special education students, saying,

*I was trying to do everything I thought I was supposed to do, now I am thinking more about what is important for my students. Like right now I am wondering if cursive is really that important, so I focus on our printing and trying to get sentences right. And when are they going to use roman numerals. You look through the books and realize that some of the stuff is just not useful, when are they going to use it? So I am doing less stuff, but more activities on that important stuff. Having the group to reflect with helped me look at that so instead of worrying how I was going to get all of this done, rushing all of the time, I cut out a lot and focused on what was important for these kids.*

This teacher has become more thoughtful and reflective about what she was teaching, a move toward having a professional orientation to her work. This passage also ties together the

development of a stance to authority, agency, and professionalism, as the teacher talks about relying on her own knowledge, knowing that her actions impact her students' learning, and that, as a professional, she is being thoughtful about her instructional decisions.

The teacher above began questioning what was important to teach; others questioned different aspects of their practice as they became more reflective, professional teachers. One teacher talked about assessment, saying, "I had never used self-assessment with my students before. Being in the study group has changed the way I grade students...[my approach] says that the grade on a test isn't the most significant thing—the learning is."

Another aspect of viewing teaching as a profession is the involvement in professional activities beyond the classroom. While some of the teachers were already involved in these activities, others reported that they were speaking up more often in faculty meetings, sharing their learnings from the group work with other teachers in and out of faculty meetings, and influencing the process for making decisions in these meetings. Some teachers at one site attempted to involve the rest of their faculty in a dialogue patterned after the study group meetings, but found that other teachers were not ready for or receptive to their efforts. Teachers from each group attended a conference of educators in their state and confidently reported on their experiences. Many at those meetings, including higher education faculty and state department officials, commented on the teachers' expertise.

Clement and Vandenberghe (2000) talked about professionalism in terms of control, accountability, and flexibility. They portrayed teachers' professionalism as being in one of three categories. Reactionary teachers are those who have no control over their work, restrict themselves to their classroom practice, work on their own, do not keep up with innovations, show no flexibility, and generally do not feel good about their work. Conservative teachers have control over their work, but feel strongly that they don't need to change and so they restrict their work to their own classroom. Progressive professionals have control over their work, account for what they do by referring to the well being of the students, invest in working as a professional team member, and are eager to refine their practices. One teacher summed up this view when she said, *we have a new respect for what each other does on a daily basis...how each of us is committed to children, to education, to the profession of teaching...we support each other, assist each other, and grow to be better educators through meeting, through talking.*

There were teachers in our study who could be placed in each of these groups, but over the course of the study, more of the teachers appeared to have the characteristics of progressive

professionals. They looked at the study group meetings as learning experiences and clearly valued the collaboration with their peers whom they considered to be professionals.

### **Stance toward collaboration**

In an article on the changing context of teaching in the new century, Lieberman and Miller (2000) reflect the opinions of many researchers when they write that teachers will have to make the transition from individualism to professional community. They go on to say that “by forgoing individual work for joint work, teachers can build a strong school culture that values collegiality, openness, and trust over detachment and territoriality” (p. 51). Since we designed the project around teacher dialogue, we expected and found that the teachers made many comments about collegiality and collaboration. While some researchers have distinguished between collaboration and collegiality, the teachers did not. We use these terms to refer a relationship that begins with sharing and learning together and leads to the development of interdependence, a relationship that goes beyond cooperation.

Collaboration was not part of the school culture at any of the study sites, with the exception of the middle school site at Linden. Much of the early conversation about collaboration and collegiality was about the lack of time and support to get together with colleagues. The teachers talked about district efforts to promote collaborative planning, usually around curriculum, that were not highly effective, either because of the way the district implemented the planned collegiality or the way the teachers interpreted the purpose.

*We need to talk so badly. We're not given that opportunity... We can't get together because of the way the school and system is structured... This year our district finally adopted one early release day per month for teacher planning. However, our time is spent listening to talking heads who offer us no growth.*

*Teachers do have blocks of time to meet together at this school... most teachers use this time to catch up on grading and planning instead of working with other teachers.*

*First grade plans together and they coordinate their units... Kindergarten does not and part of the reason is that three of us have been teaching a long, long time. And each of us has developed our own pattern. For example, when we talked about trying to teach units together... doing dinosaurs in October doesn't make sense to me and neither of us was willing to change out minds.*

Some teachers lamented their isolation—expressing their feelings that their peers were competitive and did not want to share their ideas and that their school had a climate of distrust. Others said that, while they collaborated with teachers on their grade level, it was uncommon to

have meaningful conversations with teachers from other grade levels. Taken together, their comments indicated that there was a consensus that teachers should be having conversations with colleagues but that it was not typical in their schools. This theme came out early in the study, usually when teachers were talking about curriculum or instruction. One teacher talked about curriculum, saying, "When I was younger, I did things just to get by, but now I am refining my program, and I crave collegiality. I want to talk to others, to make my program good." Another was thinking of instruction when she said, "We use each other as sounding boards, as far as what works and what doesn't work... Personally, it has helped me in terms of how to teach."

Later, teachers in each group talked about the value of having professional dialogue with colleagues, often equating dialogue with learning.

*You should have someone to share with, to talk with about teaching, about being a professional.*

*In order to grow professionally and personally, it seems that collegial support needs to be there.*

*Each time we meet I learn a little more.*

*Talking with other teachers, many of whom have taught longer than me, has broadened my perspective on education. This is the first time I've considered the impact that society has on my teaching. This is the first time I've taken a close look at trends in education, and why those trends are occurring. This is the first time I've had the opportunity to discuss at length teaching practices with teachers from the upper grades.*

One teacher talked about her realization that her learning is an important product of collegial dialogue. She said,

*This was a very productive meeting. I've accepted the fact that we're not changing the world. It's O.K. with me to come to this meeting and not have a final product. Perhaps we are the final product. Perhaps we will not make a difference by writing the Science Curriculum of the world,...but rather by the changes that are occurring within ourselves. I believe that I have a lot to share with others. I'm excited about what I'm carrying into my classroom. I believe that perhaps it's not altogether what we're teaching, but also how you approach it.*

Many teachers talked about their personal and professional growth as a result of their dialogue with colleagues. Little (1990) described variants of collegiality that form a continuum from independence to interdependence, recently confirmed by Clement and Vandenberghe (2000), progressing from storytelling and small talk, to offers of help, to sharing of ideas, and finally to joint work. We had similar experiences, although the endpoint was extended to building

knowledge, the development of new perspectives that increased their understanding of teaching and learning and of knowledge.

### **Stance toward knowledge**

It was fairly common to hear comments from many project teachers suggesting that they believed that knowledge is transmitted. According to this commonly held view, knowledge for teaching is produced by university scholars or researchers and transmitted to teachers; content knowledge is produced by experts and transmitted to teachers, who in turn transmit the knowledge to students. In connection with curriculum, instruction, and assessment, teachers talked about knowledge this way early in the project.

*New knowledge comes from the teacher and we know students have learned it when they can apply it or demonstrate it.*

*How do I give all the knowledge I have to these students?*

*It is more important to know where knowledge resides than to know the answer to the specific question.*

Beliefs about knowledge influence the way one understands learning and teaching. Some teachers had a different view of knowledge, one that eventually spread to the majority of teachers. One teacher expressed her ideas about children and knowledge, saying that most of the time “children are not given opportunities to make sense on their own. The teacher has the sole role of sense-maker. The kids just do it for that day.” Later, she explained how she teaches, illustrating her understanding that children construct knowledge.

*Rather than giving students a formula to remember, they construct their own meaning based on their prior knowledge...I am convinced that teaching students to memorize algorithms harms their ability to reason and truly problem solve.*

Accounts like hers became more common among the teachers as the project progressed. Teachers tried new approaches in their classrooms that they justified by taking a stance toward knowledge as constructed.

Many teachers initially expected the project staff to provide them with knowledge of teaching that would solve their problems. However, through the project, they began to value the dialogue because they saw how it helped them develop greater understanding. That is, they began to see themselves and their colleagues as generators of knowledge (Cochran-Smith, 1994; Marble, 1997), leading several teachers to call study group participation the best professional development they had ever had. Their view of their classroom practice changed as they came to view knowledge as constructed and saw that “learning was no longer passively receiving knowledge and teaching was

no longer dispensed expertise” (Marble, p. 61). Their more sophisticated understanding of knowledge and learning supported teachers in making changes to improve their instructional strategies.

### **Stance toward instruction**

Current understanding of learning encourages teachers to very purposefully structure learning experiences so students actively construct meaning. We designed the project with the idea that teachers could develop a stance toward instructional decision making that is clearly focused on students and learning. As we listened to the teachers talk over the course of the project, we heard evidence that most were changing their approaches and creating more student-centered classrooms or, at the very least, they were developing a rationale for making changes.

Many teachers talked about control issues early in the project. One said, “I’m afraid to let go of control, to have faith in the kids that they want to learn.” When the teachers at one site shared curriculum and instructional ideas, the consultant reported that “the group as a whole was primarily concerned with managing students and materials...no one questioned the nature of the curriculum that she was implementing.”

As they continued to meet and dialogue, more teachers used their understanding of learning to think about their approaches. For example, one teacher, thinking about curriculum, asked, “Should we teach units that are not part of the everyday experience of the children?” Another, talking about instruction, suggested that “we could use their questions to guide our lessons, find out what they know.” One teacher was considering assessment when she suggested that “having various learning tasks, such as project, collaborative learning task, test, journals, could give us a better view of the extent and breadth of a child’s knowledge of a subject.”

They also became better at critiquing lessons and ideas and thinking about coherence. One teacher told this story of a lesson.

*Another teacher is doing a unit on the Titanic, a unit the kids would love, but what is her point, what purpose does it serve, how can you go from talking about Egypt to the Titanic? I have to tell a chronological story of history so that the kids can see relationships rather than disjointed pieces. The Titanic lesson would not work for me unless the class was learning about that time period or I was not using chronology to structure the discipline.*

The study groups provided the motivation to find and explore new practices. In all of the groups, teachers reported new strategies that they were trying and connected them to their understanding of and focus on learning. One teacher changed her approach to assessment.

*I am excited about alternative assessments and have found that I truly can find out more about what my students learn by using more than one assessment for a skill. For example, reading comprehension, now, my students write summaries, draw pictures, answer questions about the story, partner read, group read, write second summaries after discussions, compare their second summaries to their first summaries and so on. I feel that I have a better understanding of what they're learning and what they need to learn.*

Another teacher talked about instruction.

*The whole way I teach has changed. I have incorporated Montessori methods for reading. I am not a Montessori teacher, but this is the approach that works best for my kids...these kids have not seen much success...they come into my room and they know what to do and they have successes every day.*

Each teacher who stayed in the study group for the two phases made some strides toward developing a stance toward instruction focused on the learner, and most made specific, observable changes in the classroom.

## Conclusion

Teacher learning is the cornerstone to school reform and improvement. Without paying attention to teacher learning and providing structures to support that learning, school reform efforts are not likely to be effective or enduring. This project undertook to learn what kinds of support teachers need and to develop strategies, tools, activities, and resources to support teacher growth. We created an opportunity for teachers to work with their colleagues in an examination of how children learn. They considered what they believed and understood about learning, refined that understanding by working together, reading, having new experiences, and engaging in dialogue. They used their understanding to make choices about curriculum, assessment, and instruction that focused on the learner.

As teachers “turned the corner” in their understanding of learning, they saw connections, interrelations, and a need for developing a more coherent practice. The teachers came to realize that by focusing on learning and the learner, they were better able to understand how curriculum, instruction, and assessment fit together. Their conversations reflected this understanding. We saw

the teachers move from being “passive actors” to being “understanding actors” in the classroom. That is, they took action based on their more sophisticated understanding of learning.

We documented the most notable changes in classroom practice among members of study groups whose teachers developed a stance toward each of the six dimensions—authority, agency, professionalism, collaboration, knowledge, and instruction—which focused on learning and the learner. Individual teachers, as well as groups of teachers, have a position along, relationship to, or stance toward, these dimensions that influences development of coherent practice. Their stance changed over the course of the project, and teachers became better able to make choices focused on the learner and, thus, to improve the chances of creating a coherent practice.

As teachers developed a stance toward authority that involved relying on their understanding, they became sense-makers who figured out the relationships between external demands, existing structures of and assumptions about schooling, and the learning needs of their students. As they developed a stance toward agency of having the power and responsibility to impact student learning, teachers took themselves off center-stage and put learning there. As they developed a stance toward teaching as a profession, they took responsibility for their own growth and learning and became thoughtful and reflective practitioners. As they developed a stance toward collaboration as a learning experience, teachers formed a relationship of interdependence with their colleagues that provided support for making changes in the classroom. As they developed a stance toward knowledge as constructed, they saw themselves and their students as meaning-makers. And as they developed a stance toward instruction as focused on learning, they changed classroom practices to better reflect their understanding of learning.

The group's dialogue and the activities supported teachers in developing a stance or a point of view from which to make decisions based on what is good for learners. As professional developers, we learned that attending to these dimensions in our work with teacher groups can help teachers move along the dimensions. We can bring activities to the table which help teachers look at teaching and learning in different ways. We can ask questions and create situations that help them uncover and examine assumptions and beliefs that may be barriers to improvement of practice. We can take enough time to work with teachers so they get past the blaming and can accept and act on their responsibility. We can use their concerns and issues to help teachers explore connections and relationships. And, we believe, coherence is a relationship issue, not an issue of materials or policy.



Our initial assumptions proved to be well founded. Dialogue, inquiry, and reflection can promote teacher learning and growth. Teachers are professionals who construct their own knowledge of teaching and learning, and as such, can and should be partners in generating knowledge of teaching. Finally, teachers can learn to focus their decision-making on students and learning. Professional development should support them in their efforts.

### **Implications and Future Work**

The dimensions can serve as a way for professional developers to think about their work with teacher groups and can help them support teachers' development of a stance that places learning at the center and results in instructional coherence. Since we believe that coherence is a relationship issue, not an issue of materials or policy, it is critical for teachers to be engaged in making sense of the relationships. Some specific approaches that we would like to highlight for professional developers to incorporate into their work with groups of teachers include

- Using dialogue facilitation skills to help teachers learn together.
- Listening to hear teachers' issues and then using them as the starting point.
- Using activities to help teachers look at teaching and learning in new ways.
- Asking questions to help them uncover and examine assumptions and beliefs.
- Bringing resources to the table that teachers identify as needed to further their learning.

Important work remains to be done. We have found that the understanding of facilitation, dialogue, and reflection is not widespread among those who currently work with preservice and inservice teachers. This way of working represents a paradigm shift for many of these individuals. Therefore, we need to learn more about building capacity in diverse individuals to become facilitators who can work with new groups of teachers in ways that enable the construction of more coherent practices.

The new focus on teacher learning that we see in the literature is slow to make its way into most schools. We need to develop better understandings of how school cultures can change to accommodate the forms of teacher learning described in the literature, such as teacher study groups, inquiry groups, and the like. Learning how schools come to function as professional learning communities could be helpful. We need to know more about how to connect the learning teachers experience from practice, inquiry, reflection, and dialogue to the world of educational research and formal knowledge. How can researchers and practitioners collaborate in ways that respect the knowledge of both for the improvement of teaching and learning in schools?

Finally, we believe that we must examine more thoroughly the relationship between teacher learning and student learning. This connection seems intuitive, but has not been thoroughly studied. And yet, our focus and that of many other research groups is on enhancing teacher learning through reflection, inquiry, dialogue, and research in order to improve student learning. We need clearer evidence that there is a positive impact on learning in these teachers' classrooms.

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**Appendix**  
**Summary of Findings Chart**  
**Determiners for Teacher Practice**

<b>Responsibility</b>	<b>Authority</b>	<b>External</b> <i>Based on confidence of documents/information from industry, frameworks, texts, and standardized tests</i>	<b>Internal</b> <i>Based on confidence about personal knowledge of standards, curriculum, assessment, and instruction</i>
	<b>Agency</b>	<b>Helpless</b> Teacher actions are determined by external factors	<b>Enabled</b> Teachers actions are determined by personal beliefs
<b>Professional Culture</b>	<b>Professionalism</b>	<b>Work</b> <i>Based on the feeling and understanding that teaching is a job to be done</i>	<b>Professional</b> <i>Based on the feeling that teaching is a profession that requires continual growth</i>
	<b>Collaboration</b>	<b>Solitary</b> Teacher tends to feels classroom practice is isolated from other teachers or classrooms.	<b>Collegial</b> Teachers tend to feel that classroom practice is benefited from collegial work.
<b>Focus on Learning</b>	<b>Sources of Knowledge</b>	<b>Given</b> <i>Based on concept that knowledge is transmitted</i>	<b>Constructed</b> <i>Based on concept that knowledge is constructed</i>
	<b>Instructional Strategies</b>	<b>Didactic</b> Teacher tells students content that is relevant and needed.	<b>Facilitative</b> Teacher creates an environment that encourages students to seek knowledge and find personal meaning in that knowledge.