Naming Inquiry:
PDS Teachers' Perceptions of Teacher Research and Living an Inquiry Stance toward Teaching

By Jennifer L. Snow-Gerono

Introduction

There is an abundance of literature focusing on teacher inquiry or educational action research (Dana & Yendol-Silva, 2003; Cochran-Smith, 2002; Cochran-Smith & Lytle, 2001, 1999, 1993, 1992, 1990; Burnaford et al, 2001; Noffke & Stevensen, 1995; Gore & Zeichner, 1991; Kincheloe, 1991). This literature discusses the process of teacher research, the conceptual framework(s) for teacher research, the projects conducted as teacher research, and the potential for an inquiry stance toward teaching to be "critical and transformative, a stance linked not only to high standards for the learning of all students but also to social change and social justice and to the individual and collective professional growth of teachers"

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(Cochran-Smith & Lytle, 2001, p. 46). In descriptions and analyses of teacher research, inquiry is identified as a process or professional positioning on the generation of knowledge and on one's own practice (Dana & Yendol-Silva, 2003). This research study aimed to describe the experiences of Professional Development School teachers who were living an inquiry stance toward teaching. Throughout this study, "living an inquiry stance toward teaching" was used in an attempt to describe teacher inquiry as

a way of being and knowing for these PDS teachers more than methods for a technical process.

For the purpose of this study, teacher inquiry was defined as the "systematic, intentional inquiry by teachers" (Cochran-Smith & Lytle, 1993). Dana & Yendol-Silva (2003) also discuss an inquiry stance toward teaching where "this stance becomes a professional positioning, owned by the teacher, where questioning one's own practice becomes part of the teacher's work and eventually a part of the teaching culture" (p. 9). As a researcher, I came to this project with the understanding that professional development centered on inquiry holds the potential for teachers to come to know and understand their individual agency as a means for educational change and their own professional development (Lieberman & Miller, 2001). For the PDS teachers in this study, living an inquiry stance toward teaching is a framework where teachers own "knowledge-*of*-practice" (Cochran-Smith & Lytle, 2001). Teachers have transformed notions of "knowledge-*for*-practice" from external educational researchers and "knowledge-*in*-practice" from inside classrooms to a "knowledge-*of*-practice," where the generation of teaching knowledge combines research conducted outside of classrooms as well as that within them.

Teachers working in a PDS partnership context identified themselves as living an inquiry stance toward teaching by responding to a letter of invitation with specific characteristics of reflective teaching listed in it. They then participated in this study to discuss "what is inquiry?" In our conversations, teachers named inquiry in several different forms, primarily at my insistence. Ultimately we identified these different forms in a visual aid demonstrating the interaction and dynamic complexity of the various forms of inquiry identified. However, upon reflecting on this process, I was confounded by my own insistence to name inquiry. One of the teachers, Heather, continually emphasized her "inquiry stance" as a part of who she is as a teacher, learner, professional, and person. When pushed to talk about inquiry specifically, she said with a laugh, "I realize that I had already gone through the process, but I don't think I necessarily understood that as inquiry. I've never been one for jargon and labels. I'm not good with it! I think I go more on a feeling. I think this looks like a good idea so I'll do it" (interview, 2/2002, p. 9).

With the identification of varied forms of inquiry, the teachers in this study were comfortable identifying their positions on inquiry, but a tension arose in the necessity or purpose of naming inquiry at all. Therefore, this article will describe the interactive forms of inquiry identified by these teachers as well as the tensions inherent within the different forms and within the very act of naming the process. The jargon and labeling used within this article are used in an attempt to assist in the conceptual framing of inquiry. Yet, this was done so with an awareness of the irony of using "academic speak" in attempting to bring the positions and perceptions of this study's participants to the forefront. The following sections address this study's methodology, the situated context for inquiry, identification of the varied forms of inquiry, and an analysis of the findings.

Methodology

This phenomenological case study (Merriam, 1998) aimed to determine what an experience — teacher inquiry — means for the persons —PDS teachers — who have had the experience and are able to provide a comprehensive description of it (Moustakas, 1994). Applying purposeful sampling, I invited all PDS teachers involved in a local school-university partnership to participate in this study if they identified with provided characteristics of reflective teaching. Due to this study's purpose of describing the teachers' experiences and perceptions, I did not wish to define inquiry and/or an inquiry stance for potential participants up front. Therefore, I issued an invitation "to talk with teachers who identify with the following characteristics:

◆ Teachers who are reflective, that is, teachers who question and deliberate about their decisions and actions, and who recognize change and growth in themselves as a result of being reflective.

◆ Teachers who consider their questions and deliberations from various perspectives, including concrete evidence.

◆ Teachers who seek new ideas and understandings regularly and are willing to take risks in order to improve their classrooms and the teaching profession" (characteristics listed on letter of invitation to all PDS teachers).

Teachers responded to this invitation and indicated if they were willing to participate in a study of teachers who embrace an inquiry stance. They agreed to engage in at least three long interviews (Merriam, 1998). Data collection also included field observations (Patton, 1990), in which I entered the participants' classrooms or other professional environments where they indicated they lived out their inquiry stance toward teaching in order to develop deep ethnographic understanding of their experiences.

The primary data source for this study was interview transcripts from three one-on-one, semi-structured interviews with each participant. Interviews were guided by a set of questions and issues to be explored (for example, How do you define teacher inquiry? and How did you come to this understanding?) but controlled by the respondents and their understandings of teacher inquiry (Merriam, 1998). The interview protocols focused on issues connected to what an inquiry stance toward teaching looks like; how an inquiry stance toward teaching may be cultivated; and how an inquiry stance toward teaching impacts (or not) the teachers' classrooms and schools, and the PDS partnership. Field notes provided data for analysis and a means of triangulation when compared and contrasted with interview transcripts. Analysis of these data sources included reading and rereading interview transcripts and field notes while "memoing" the data with initial codes (Creswell, 1998). These initial codes generated themes and patterns within individual participant data, creating

a "textual description" (Cresswell, 1998) for each participant's understanding(s) of teacher inquiry. The individual data analysis was shared with the participants in order to conduct member checks.

The data sources for this study were used in creating a "portrait of an inquiry stance toward teaching" for each of the participants. These portraits provided rich (Erikson, 1986), thick (Geertz, 1973) description of the essence of inquiry for teachers who have cultivated a self-identified inquiry stance toward teaching. These portraits included findings indicating how these PDS teachers cultivated such an inquiry stance and how they, in turn, understood the interactive and varied forms of teacher inquiry they identified. After individual member checks, the portraits were used as data for cross-case analysis to generate a "composite description" of the experience of these PDS teachers' living an inquiry stance toward teaching.

Situating the Context: A Framework for Inquiry

The PDS collaborative in this study is the result of a Holmes Partnership commitment between a large Northeastern university and four elementary schools in a local school district. As the partnership evolved, the basis for teacher preparation remained the same: Prospective teachers — "interns" — complete an undergraduate internship where learning to teach is accomplished through teaming with a mentor teacher for an entire school year (Silva & Dana, 2001). Interns are required to complete teacher inquiry projects and present their findings at an annual PDS teacher inquiry conference. Additionally, mentor teachers participate in teacher inquiry in one of three ways: (1) completing their own teacher inquiry (individually or in collaboration with one or more colleagues), (2) collaborating with their intern on teacher inquiry, and/or (3) supporting their intern's teacher inquiry. PDS teachers in this partnership who are not mentor teachers or currently working with interns are also encouraged to engage in teacher inquiry. There is an inquiry course held each spring semester to support intern and mentor teachers' inquiry efforts. As the culture of inquiry within this PDS evolved (Dana, Silva, & Snow-Gerono, 2002) and several teachers began to cultivate an inquiry stance toward their teaching, some mentors or PDS teachers were engaging in teacher inquiry without the support of the inquiry course. In fact, several PDS teachers (mentors and non-mentors) identified themselves as living an inquiry stance toward teaching and shared their perceptions of this experience in order to participate in this study.

The six PDS teachers who volunteered to participate in this study include Elyse, Heather, Lydia, Maggie, Penny, and Shelly. Their experience in this school district ranged from six-18 years, and they had all worked in a PDS site since the partnership's inception. Five of the six teachers were active PDS participants in the sense that they regularly worked as mentor teachers and participated in professional development teams and courses. However, one teacher, Lydia, had not participated

as a mentor teacher, although she had conducted teacher inquiry as a means for alternative teacher evaluation in her school.

Findings

Interactive Forms of Inquiry

> Because teacher research is such a generative concept, it can be shaped and reshaped to further virtually any educational agenda. . . . In this sense, the growth of the teacher research movement hinges on a paradox: As it is used in the service of more and more agendas and even institutionalized in certain contexts, it is in danger of becoming anything and everything (Cochran-Smith & Lytle, 1998). As we know, however, anything and everything often lead in the end to nothing of consequence or power. It would be unfortunate if the generative nature of teacher research ended up contributing to either its marginalization and trivialization, on the one hand, or to its subtle co-optation or colonization, on the other. (Cochran-Smith & Lytle, 1999, p. 17)

Findings from this study include the participants' identifying teacher inquiry as containing a number of forms. Naming these various forms of inquiry was completed in an environment of respect for inquiry and its power for change and improved teaching. Shelly described inquiry as "a wonderful way to continue to improve upon things . . . You can do better . . . [when you] spend some good quality time in making important changes, or important discoveries" (interview, 3/2002, p. 3). She also identified it as a "method" while Penny emphasized, "it helped me to think about [questions] in a systematic way, and gave me some idea for how I could make changes. It was more than just questioning and complaining, but giving me some ways to go about changing" (interview, 4/2002, p. 12). Teacher inquiry is often connected to conducting projects of study for the benefit of students in the classroom (see for example, Dana & Yendol-Silva, 2003; Burnaford, Fischer, & Hobson, 2001; Noffke & Stevenson, 1995; Cochran-Smith & Lytle, 1993; Hubbard & Power, 1999). All of these PDS teachers mentioned the ultimate benefit of inquiry being for their students. Elyse said, "by doing inquiry. . . it pushes me to come up with activities that [the students] can relate to that can help them reach goals . . . It's made me much more in tune with them as learners" (interview, 4/2002, p. 15).

PDS teachers who participated in this study agreed that inquiry was defined by, in Heather's words, "spirals," or as we came to describe it together, "multiple, intersecting venn diagrams." The forms of inquiry were described as interactive because they could occasionally be occurring simultaneously or in isolation. These PDS teachers discussed inquiry in terms of it being both formal and informal. They agreed that neither formal nor informal inquiry was better than the other for all situations. Therefore, the forms of inquiry were described as interactive rather than hierarchical or linear. Interactive forms of inquiry were viewed as appropriate for different contexts and questions and would be used by the teachers according to current, situational needs. Within informal and formal teacher inquiry, the partici-

pants also demonstrated an understanding of inquiry as connected to scholarship, reflection, personal experience, intuition, logistics, and input from children. A few but not all of the teachers included curriculum inquiry as a specific form. These understandings were all interwoven in the concepts of inquiry as a project and inquiry as a stance. The following figure represents multiple, intersecting venn diagrams to demonstrate these teachers' understandings of forms of teacher inquiry and how they may interact with each other.

Figure 1: Interactive Forms of Inquiry
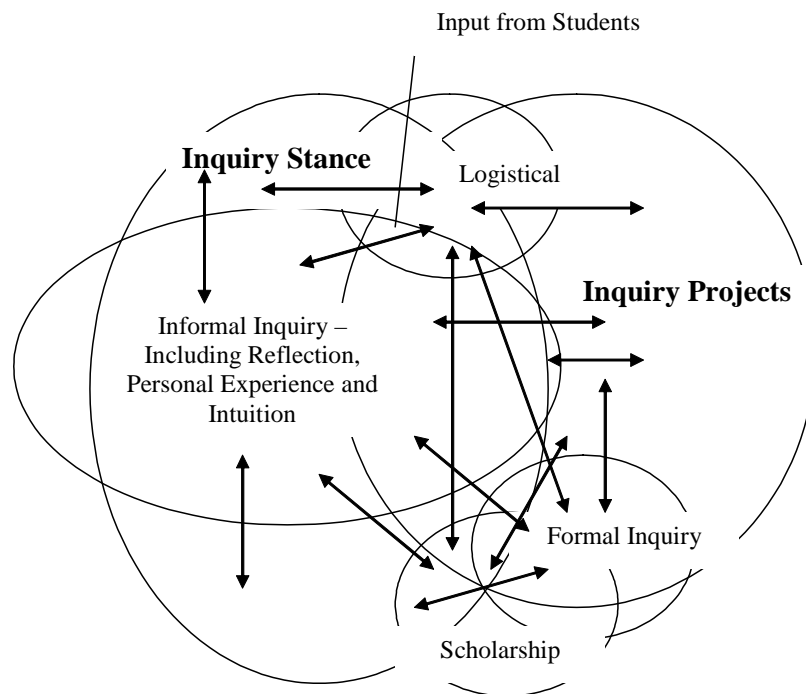
All of the teachers shared some kind of understanding of formal and informal forms of inquiry. According to these PDS teachers, informal inquiry was more closely aligned with everyday reflection, personal experience, intuition or an inquiry stance. On the other hand, formal inquiry was closely connected to understandings of inquiry projects and the formal method or process of collecting and analyzing data. There were also variables within an inquiry project (formal inquiry) and an inquiry stance (informal inquiry). Inquiry was termed formal when there were identifiable markers for the process. For example, when an inquiry project could be presented and shared through a discussion of data, it could be called formal. Therefore, an inquiry stance might be more informal because, as Penny stated, it is

"in your head." When the inquiry stance and inquiry projects circles overlap, space is provided for teachers to follow questions through a formal process.

Additionally, inquiry may be logistical, according to these teachers. As Heather described the example of a teacher inquiring into organization, she understood that teacher's question as having an individual benefit. Oftentimes, teachers engage in inquiry for the benefit of their classrooms. However, rarely in this study do teachers explicitly discuss the importance of a collective struggle to transform social conditions as an aspect of their inquiry stance. This transformative purpose was a part of my conceptual framework for naming inquiry, but not explicitly a part of these PDS teachers' stories. Although theoretically these teachers have an understanding of empowerment or transformation connected to inquiry, for them inquiry was primarily connected to individual practice and classrooms and remained separate from collective social justice issues or a large movement toward transforming the entire profession. Heather hinted at this tension in her conversations but was unwilling to critique another teacher's inquiry for its "logistical" flavor. Inquiries that respond to "how to . . ." questions are typically categorized as logistical in Figure 1.

At first, Heather wondered if the logistical questions that she had seen teachers pursue were really part of an inquiry stance. For example, she talked about inquiries where teachers conducted projects about organization.

> I guess some of the inquiry projects seem to be very, deal with logistics, but they're asking, they're posing questions. . . . I guess you could on some level talk about inquiry as something that goes beyond something more external. But, you know, they also use input from kids. . . . So in that way it wasn't so strictly logistical. (interview, 2/2002, p. 4)

Input from students was highlighted as important data in inquiry for these teachers. Sharing inquiry experiences in public forums was also a significant form. As Heather shared, "I see [inquiry] — I think of adjectives that come to mind — like process, ongoing, formal, informal. It seems like it can be done formally to highlight or to bring out the scholarship or the reflective nature of teaching. Or at least if it's not there then that's what needs to be there" (interview, 4/2002, p. 5). Shelly also emphasized sharing as a way to "celebrate" inquiry and what teachers have learned and changed in their teaching. This sharing goes a long way in legitimating teaching as a scholarly profession. Heather said,

> Teachers are just better teachers, we're better thinkers, we're helping kids learn. In terms of the profession, when people think it's just not scholarly — you don't have to be too smart. That's an issue, so I think there are things for the profession that make us more visible and more, I hate this word, legitimate . . . ." (interview, 4/2002, p. 5)

Inquiry as scholarship plays a large role in the recognition of teaching as a profession through the generation of knowledge and the sharing of that knowledge.

Inherent Tensions between Inquiry Projects and an Inquiry Stance

As indicated by Figure 1, inquiry projects and an inquiry stance are two of the most common and most important aspects of inquiry to these PDS teachers. They either undertake formal inquiry projects or, at the very least, understand their significance. Additionally, they believe their inquiry stance toward teaching provides a powerful persona for teaching. They believe it offers them opportunities to change and grow and to transform aspects of the teaching profession. However, they understand that inquiry projects do not necessarily indicate a teacher lives within an inquiry stance. Nor do teachers who have an inquiry stance toward teaching need to conduct formal inquiry projects on a consistent basis.

Penny described the differences, in her mind, between an inquiry project and an inquiry stance.

> I think the stance is the way of being. It's how you are in your classroom. A project is more of a formal, I'm going to sit down, and research. Or go to experts and I'm going to collect data formally. I'm going to analyze the data. I'm going to write something up, whether it's for a presentation or to redirect a unit or to do a behavior report on a student or . . . I probably did lots of informal inquiry before I ever had more formal inquiry. (interview, 3/2002, p. 5)

Elyse also spoke to the differences she perceived between an inquiry project and an inquiry stance: "An inquiry stance is a mode of being, a state. . . . And, it is present in everything, whereas maybe an inquiry project then, it could be a separate thing, standing on its own. You don't operate that way except when you're in on that project" (interview, 3/2002, p. 3). However, Shelly shared a more integrated understanding of an inquiry stance and projects. Shelly said,

> I think they go together because doing the project and learning how to do it in the beginning of the year really helped to define that or help me foster that philosophy. (interview, 3/2002, p. 4)

When probed further about whether a teacher could conduct a project and not develop this philosophy or stance, Shelly said, "then I'm not sure they did it properly" (interview, 3/2002, p. 5). For her, the experience of conducting inquiry projects was directly related to an inquiry stance. She understood an inquiry project as something you must *do* in order to take up an inquiry stance.

Maggie had undertaken several inquiry projects in connection with her role in this PDS. She took the PDS inquiry course and led seminars in the course to share her experiences and help others to understand her teacher inquiry process. Maggie defined an inquiry stance in the following way:

> An inquiry stance, I think, is one that professionals are open enough to say, I don't know. I need help. How can I go about this? Where can I go? . . . And, it's not a question with a definite answer. It's where one questions, one seeks answers, and seeks to grow from that. How can I do this better? . . . I do believe that it's part of your practice. It is how I improve my classroom. It helps me know how I *feel* about my classroom. It is how

I want to go about mentoring an intern — to say that you need to question…. (interview, 3/2002, p. 4)

For Maggie, her inquiry stance was essentially a "continuation of learning, and a confirmation of what we're doing in our classroom. . . .And, I think the children are the ones who confirm it" (interview, 3/2002, p. 7). She believed that her inquiry stance and the power of inquiry were evidenced in her "changing what I'm doing" (interview, 3/2002, p. 7). When she made changes in her classroom, with her intern, with her colleagues, or even within herself, she considered this to be her inquiry stance in action.

On the other hand, Maggie described an inquiry project as "pretty much putting what you believe into work" (interview, 2/2002, p. 9). She understood the importance of evidence and mentioned data collection when talking about specific inquiry projects.

I am keeping a record, a behavioral record. So there is data collection for that [student]. . . . I keep writing samples, I keep notes… data collection, if you really want to see where you've gone. . . . (interview, 2/2002, p. 12)

For Maggie, even though she recognized evidence as necessary for inquiry, she believed the questions were really what drive inquiry. Maggie provided an example of needing evidence when conducting an inquiry project into a particular question. "In order to take a stance to look into children's differentiation of learning, children with learning styles, if you're worried about them, I think you do need the evidence… to make an intelligent decision" (interview, 3/2002, p. 7). For Maggie, the stance was "who I have become as an experienced teacher."

Analysis of Tensions within Naming Inquiry

Inquiry Forms are Interactive, Not Hierarchical

The naming of inquiry in its varied forms led to more tensions and collaborative analysis among these PDS teachers and myself as the researcher. More specifically, Heather and I talked about the various forms of inquiry and at first spoke in terms of the forms as if they were on a continuum. However, we soon became uncomfortable with the idea of one form being the "highest" or that there is a logical progression from one level to the next, even though the cultivation of an inquiry stance toward teaching was an explicit goal of this PDS partnership. Therefore, we reworked a visual aid to match our concerns. Initially looking at inquiry as informal and formal carried with it the worry that one form was more important than the other form or that all teachers should aspire to formalizing inquiry as an endpoint. In her teaching, Heather espoused the importance of a conceptual as opposed to procedural understanding of inquiry. Heather described herself as a "conceptual learner" and worked as a member of the PDS math team, which emphasized conceptual understandings of mathematics as opposed to memorizing procedures. Heather

said, "I could never, I didn't want to hold all [the mathematical procedures] in my head . . . it was pretty meaningless, so I would soon forget it . . . so that was an area I went after in my teaching . . . I started making major changes myself" (interview, 2/2002, p. 6). Heather taught math so that her students were focused on conceptual understandings as opposed to memorizing mathematical procedures. When speaking about a visual aid for the interactive forms of inquiry, she said, "if you look at it this way [linear continuum] and you think of formal, the formal almost resounds back to procedural" (interview, 4/2002, p. 3). Figure 1 was designed to demonstrate multiple aspects of inquiry and how they interact and intersect to present a more conceptual understanding of living inquiry.

Maggie concurred with the idea of forms of inquiry that are non-hierarchical because she viewed inquiry as connected to more than one of the forms at a time, hence they were interactive. She acknowledged that the various forms of inquiry are sometimes interrelated and sometimes separate. In her conversations about inquiry, Maggie discussed moments in her teaching that focused on an inquiry stance, inquiry projects, informal inquiry, formal inquiry (for example, following deliberate steps to pursue responses to a question but not conducting an inquiry project as it is understood in this context), and inquiry connected to curriculum and questions in general. Because Maggie understood the forms of inquiry as occurring together and separately at different times, depending on the particular situation, her conversations supported the idea that the forms of inquiry were interactive and non-hierarchical. Hence, a teacher may be participating in scholarship — raising voices to transform the profession — and an inquiry project at the same time. A good example of this is when teachers present their inquiry projects to audiences outside their immediate schools and districts. As Dana & Yendol-Silva (2003) indicate, teacher inquiry is a promising vehicle for "rais[ing] teachers' voices in discussions of educational reform, and ultimately, transform[ing] assumptions about the teaching profession itself" (p. 2). Additionally, when Maggie shared her understandings of inquiry as a stance toward teaching, she involved more complex notions of inquiry projects and an inquiry stance as potentially integrated forms of teacher inquiry. When an inquiry stance is conceived as completely separate from an inquiry project, it loses its visibility within the naming of informal inquiry, which may, unfortunately, delegitimate its power for teacher development and educational change.

Elyse provided an understanding of inquiry where even though she viewed inquiry as a "constant state," she recognized the varied forms within that state. "[Inquiry is] a mindset. Before I thought of it more as a project and an assignment — teacher inquiry was this separate entity. But, I see this program [PDS] really has woven that underlying theme into everything. . . A state of inquiry is thinking and questioning, and you're in this round about mode. And, if you're not in that state, then, you're just doing, and maybe not reflecting, analyzing. It's the whole circle of things" (interview, 3/2002, p. 2). The varied forms of inquiry provide different entry points for teachers, and because Elyse understands that different teachers will

enter the state of inquiry at different spaces, she does not see an inherent progression from one form to the next.

Lydia noted that she had an inquiry stance before she conducted a formal inquiry project. Lydia claimed she "has been doing this for years" but had just recently "named" the experience of inquiry. Lydia's experience with inquiry projects contributed to her formalization of an inquiry stance; however, her informal inquiry, primarily through reflection and working with children, was the foundation of her stance. Penny talked about different forms of inquiry, in no hierarchical order, but as different aspects of the process of inquiry. With several forms discussed by all of these PDS teachers, no one could identify rules or guidelines for moments where only one form was experienced as more important than another. This notion of an integration of the multiple forms is important when considering professional development for educators because in efforts to name inquiry, one potentially more visible form may be emphasized at the expense of others. We must be certain in our naming of inquiry that we do not marginalize or colonize the power of an inquiry stance as an intuitive persona that teachers like Lydia and Maggie maintain they have been emulating for years, perhaps just without naming it. This also leads to the question of how to cultivate an inquiry stance toward teaching considering the tensions that are involved.

Which Comes First — Project or Stance?

When addressing the inherent tensions between inquiry projects and an inquiry stance, it seems difficult to pinpoint whether an inquiry project naturally cultivates an inquiry stance or if an existing inquiry stance simply encourages undertaking inquiry projects. In fact, several of these PDS teachers seemed quite comfortable with this ambiguity. Some of the participants were adamant that they always had an inquiry stance and just recently formalized it with inquiry projects; while at the same time, others felt equally strongly that their experience with inquiry projects greatly impacted their cultivation of an inquiry stance toward teaching. Either way, they were comfortable with different individuals experiencing the cultivation of a formal inquiry stance in contradictory ways.

Lydia was perhaps most adamant that she has always been a questioning, inquiring teacher. However, when she was presented with the opportunity to conduct a teacher inquiry project for an alternative evaluation, she was given the terminology or language to identify her inquiry stance toward teaching. Lydia viewed teacher inquiry projects as a way to wake up a dormant inquiry stance. She also felt it was a common occurrence in education to be participating in some phenomenon for years before some educational guru names it for you. As she described, "it's like, oh, I've done that for years. I didn't know it had a name" (interview, 2/2002, p. 6). Likewise, Elyse understood inquiry as an attitude she had always had, but her inquiry stance was cultivated by participation in this PDS, in particular her work with interns required to conduct inquiry projects.

Maggie viewed her experience with inquiry projects as a vehicle for her life within an inquiry stance toward teaching. Maggie understood that inquiry projects and questions were often a means for identifying evidence of what will help the children most in the classroom. When Maggie talked about her continual, informal inquiry, or stance, she said, "If you don't inquire every day about your teaching practice, you don't get anywhere . . . I think it's the wonderings where you go in and ask, 'I wonder why that kid isn't working very well. I wonder if it's this or that'" (interview, 2/2002, p. 7). For Maggie, her collaboration with an intern was important because it added to the conversation about informal inquiries on a daily basis. She remarked that when she began participating in PDS activities, she found a name or label for this type of wondering. When she heard about inquiry from this PDS, she thought, "I've been doing that all the way around" (interview, 2/2002, p. 10). She said that inquiry made these informal questions and "wonderings" more meaningful.

> It's seeking to make it meaningful and thoughtful and that there was no one answer. . . . Inquiry made it feel that everything was o.k. . . . you talk about some kind of theory and you think . . . oh, I do that every day! (interview, 2/2002, p. 10)

Maggie appreciated an environment where she did not have to be so caught up in the theory of inquiry that she could not recognize that she was already doing it. She said she liked working with people who were "not hung up on terms and language — that makes it useful, which makes the stance feel very comfortable where you are" (interview 2/2002, p. 10). This PDS partnership's informal introduction to teacher inquiry as "wondering" about your own practice allowed Maggie to embrace her inquiry stance without feeling awkward about researcher's theories and terminology.

Shelly provided a case, however, where even if she had a propensity to question previously, her experience in this PDS with inquiry projects was the impetus for her cultivation of an inquiry stance. Shelly credited the PDS inquiry course with her development and understanding of an inquiry stance toward teaching. She claimed that this course "has given me a different perspective . . . on how I teach, and what I think about when I'm teaching" (interview, 3/2002, p. 4). Shelly continued to praise the inquiry course for strongly impacting her perceptions of teacher inquiry.

> I don't think I would have had a chance to learn more about my teaching if I didn't have that course help me examine it. You don't always have time to examine it. You're so busy with you're teaching . . . with your life. You do the best you can, and you make it through the year, and you do the best you can. But, this course gave me opportunity to do more than wish I would have done better . . . this course gives you an opportunity to do something about it in a way that makes sense. (interview, 2/2002, p. 12)

In this discussion, Shelly described her belief that if she had not conducted a teacher inquiry project with her first PDS intern and taken the PDS inquiry course, she would not have cultivated an inquiry stance toward teaching. However, since her first encounter with teacher inquiry — in the form of a project — Shelly was "hooked" and claimed she would continue to engage in teacher inquiry throughout her career.

Like Shelly, Penny was an avid participant in inquiry projects. She acknowledged that the PDS course offered her this avenue for professional growth, and although she might have always questioned, conducting inquiry projects enhanced and cultivated her inquiry stance toward teaching.

The preceding discussion does not necessarily answer the question, "Which comes first — project or stance?" However, it does add insight to the complexity of the question. Like the proverbial "chicken or the egg" question, an inquiry project may lead to the cultivation of an inquiry stance just as an existing inquiry stance may lead to engaging in formal inquiry projects (or not). However the answer to this question is resolved, typically inquiry projects and an inquiry stance are reciprocal components of teacher inquiry. Rarely, these teachers suggested, could there be times when an inquiry project was in fact conducted without the generation of an inquiry stance. And, certainly, one could have an inquiry stance without needing to undertake inquiry projects. Elyse — a participant who did not conduct formal PDS inquiry projects — named the key to an inquiry stance as a "shift in understanding."

The Shift in Understanding.

Before going into more detail about what Elyse calls a "shift in understanding," it is important to frame this perspective within the tensions that conceptual and procedural understandings provide. Like Heather, several of these PDS teachers aimed to create opportunities for their students to learn and understand subject matter conceptually rather than procedurally. This is not to suggest that procedures are inherently bad, but simply to recognize that a conceptual *understanding* offers more opportunities for individual interpretation and growth. A conceptual understanding provides more than memorizing and following procedures. In a similar analogy, the participants in this study discussed conceptual and procedural understandings of teacher inquiry. Heather discussed approaching teacher inquiry conceptually as opposed to procedurally. Perhaps when a conceptual understanding of inquiry precedes a teacher's engagement with inquiry projects, an inquiry stance toward teaching is cultivated. Or perhaps without a conceptual understanding of inquiry an inquiry project becomes simply a list of procedures to complete in order to conduct research. What the teachers in this study suggested is that teachers must experience some type of a "shift" in understanding when undertaking inquiry projects in order to cultivate an inquiry stance.

Heather said, "if you have more of an inquiry stance toward teaching rather than just a set of procedures, then you're going to be more able to have it become a part of you, to get more engaged with the teaching process" (interview, 2/2002, p. 1). Heather used the example of the changed nature of her conversations with her intern after her intern completed an inquiry project. "The conversations are very different. They're more about the process of teaching because I think she has enough experience to start to understand that on a different level . . . it's not just procedural"

(interview, 2/2002, p. 9). Heather claimed that an inquiry project had a strong impact on a teacher's understanding of inquiry if the teacher reflected on the reasoning behind conducting such a project.

> That seems to be an important piece so that it isn't just meaningless. Even if it's just for them to articulate it to themselves, like 'I'm frustrated because every time we go to write, I hear kids say I don't know what to write' . . . I think that they need help breaking it down and organizing it. I think those are important parts, but so that [an inquiry project] doesn't seem so nebulous. I think that they're picking it for reasons. It's more purposeful than maybe they're aware of, and if they have to somehow reflect on how that came about, that might be more helpful, even before they know that's going to necessarily be their question. . . . Why are you curious about that? (interview, 4/2002, p. 23)

The deconstruction she described is part of shifting to a conceptual rather than a procedural understanding of inquiry and teaching. Lydia framed her discussion of the shift from inquiry projects to an inquiry stance (or vice versa) as having "teacher sense" of the "big picture" of education. Maggie called her inquiry stance, "staying mentally healthy. I talk to my colleagues about things. I collaborate in learning" (interview, 2/2002, p. 6). Shifting from inquiry as procedural to inquiry as conceptual or at least understanding inquiry as conceptual was important to these teachers' perceptions of living an inquiry stance toward teaching. This big-picture sense contributed more to their personal growth and resulting classroom changes than simply conducting the procedures required for an inquiry project.

Heather again referred to her experiences as a mentor teacher when she discussed inquiry projects as an impetus for an inquiry stance. She talked about her interns "lighting up" every year when they realized "everybody can ask questions." Heather described:

> Because they experience [inquiry], and because they're able to ask questions . . . everybody asks questions . . . not everybody is able to answer questions, but everybody is capable of, to get that natural curiosity stimulated again, which I think so often gets squelched . . . they get very excited because I think somehow they feel it is empowering, because everybody can ask questions. . . . They start to understand that they're looking kind of diagnostically. There's no right answer . . . there is a certain humility you need, and confidence, to not know something. (interview, 4/2002, p. 18)

Heather's description of her intern's excitement with questioning her own practices and having that become acceptable in the teaching profession underscores the limitations of inquiry in a traditional view of teaching. Heather views an inquiry stance as permission to not know. When a teacher is supposed to "know everything," inquiry, as described above by Heather, can be problematic for teachers. However, inquiry holds potential for teachers to grow and sustain their own professional development when educators recognize that questioning is sometimes more important and more meaningful than knowing the answer.

Penny outlined the idea that one can have different understandings of teacher inquiry. As a matter of fact, Penny was one of the teachers who claimed that one could have an inquiry stance without conducting an inquiry project. Penny had consistently engaged in inquiry projects as a means for her professional growth, her students' learning, and her and her colleagues' collaborative growth. She suggested a situation where a teacher could undertake an inquiry project without cultivating an inquiry stance toward teaching. "You just follow the steps, come up with a question; in that case it would be, you would see somebody who did it once a year; it wasn't a part of everything in their classroom. It's 'this is my project'" (interview, 3/2002, p. 5). This perception of an inquiry project is a procedural understanding of following the necessary steps. It does not necessarily impact one's teaching ideology. A teacher in that situation would not have undergone the "shift in understanding." Penny explained, "you have to be able to think about what's going on in order to develop your questions" (interview, 3/2002, p. 7). This more deeply involved reflection is akin to what Heather shared when describing her experience with interns. When they are pushed to reflect on the larger process of coming to understand their questions and where they came from, they shift from the procedures involved in conducting an inquiry project to the conceptual understanding of inquiry as a way of being and knowing (Lytle & Cochran-Smith, 1992). This conceptual shift involves teachers' moving to a new position, a position in which they are comfortable with the continual posing of questions about their teaching and its impact on learners. Teachers with this conceptual understanding of inquiry do not wait for problems to arise before questioning what they do. They view these questions as opportunities to learn, and they tolerate the ambiguity of temporarily not knowing the answer; but they are not content to stay in that position. They follow the evidence they identify and make changes based on their findings. In this sense, a conceptual understanding of teacher inquiry includes a mindset of continuous growth and improvement.

Discussion and Implications for Teacher Development

The interactive inquiry forms identified in this study demonstrate these PDS teachers' understandings of the complexity of inquiry projects and of inquiry as a stance toward teaching. This complexity stems in part from pushing the issue of naming inquiry. As this study demostrates, it is important to regard the forms of inquiry holistically, valuing their integration and interaction. This study focused on a small group of PDS teachers, but the data produced here suggests there is more to teacher inquiry than conducting a project or embracing an inquiry stance toward teaching. Teacher inquiry involves personal experiences and intuition as well as input from students. These teachers offer inquiry as a means for not only changing their teaching practice but also for altering the teaching profession and its less-than-scholarly reputation, as was evidenced in Heather's conversations. What appeared

most important to Elyse, however, in her understanding of an inquiry stance was an internal transformation, a "shift in understanding." This shift involves moving from procedural actions to inquiry based in a conceptual positioning toward knowledge and what it means to know. The PDS teachers who participated in this study extended their development of inquiry as stance to include interactive relationships among varied forms of inquiry. This approach toward interactive forms of inquiry provided space for these teachers to work through the tensions their understandings of an inquiry project and an inquiry stance provided.

However, tensions remain within the idea that inquiry must be named. What complicates the idea of naming inquiry even more is the dilemma of who decides what constitutes an inquiry. What makes a question worthy? Lydia and Maggie both alluded to the fact that teacher inquiry was a term given to them by someone else; however, it was a process — a stance — that they had been living for years prior to this naming. Who has the power to name an experience for individuals? Discussions of naming inquiry can be very focused on issues of what the question or inquiry is and how it is pursued, not to mention how it is determined to be an inquiry. Yet, another question persists subtly in the tension of naming inquiry — Why? Why does teacher inquiry need to be named in these interactive forms or in other ways? What these interactive forms may demonstrate more meaningfully than forms of inquiry is how inquiry should be perceived in order to be done well. The integration of inquiry forms and these teachers' "shift in understanding" could be a powerful key for teachers not only to unlock notions about the generation of knowledge and to become knowledge-creators but also for them to become transformative intellectuals who effect educational change.

Transforming the profession of teaching also indicates the tension within these teachers' stories of a collective or individual purpose for engaging in teacher inquiry. Is a collective, transformational intent necessary for naming something as inquiry? If so, does that lessen the power and importance of the individual changes these teachers make in their classrooms for the benefit of their elementary school students? Clearly, the question of why continues . . . why do teachers engage in inquiry? And, why do educators, including myself, stubbornly persist in naming it? Seeking these answers could provide teacher educators with knowledge and information for designing professional development opportunities for teachers. Educators need space to cultivate an inquiry stance toward teaching and conduct inquiry projects. This space should emphasize the connections to student learning and social change that will impact the profession of education while at the same time valuing what teachers already do as a part of their daily professional practice.

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